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Ionospheric Research at Huancayo Observatory, Peru, January, 1938-June, 1946

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PREFACE

The history of research in terrestrial magnetism, especially that aspect of earth-magnetism arising in its atmosphere, is replete with examples of consequences of real benefit to mankind. In examining this great field of earth-science, man has not only vastly improved his comprehension of the workings of nature and adapted himself to them, thereby making their phenomena more useful to himself, but in doing so has created mechanical concepts and devices which in themselves represent substantial steps in his technological and material evolution. From the classic pulse-echo experiment of Breit and Tuve has grown a real appreciation of the ionized layers of the outer atmosphere from which is derived much of our modern knowledge of geomagnetism and of the Sun. On such foundations the vast international radio communication networks have been built, and from the mechanical concepts invented for the experiment has arisen radar with its essential role in our future material progress. The source of benefits acquired for mankind in pure research can no better be demonstrated than from the many applications which have accrued from this yet uncompleted search for the origin of Earth's magnetism.

It was natural that a laboratory dedicated to research into the phenomena of the Earth's magnetic field should turn to the physics of the outer atmosphere in its investigations. The great men in the development of this area of science--Gilbert, Gauss, Stewart, Schuster, and Chapman--had constructed a picture from which it became ever more apparent that the ephemeral variations of the Earth's magnetic field had their source in electrical phenomena of the atmosphere. At the same time were emerging the tools of exploration, the knowledge of radio-frequency electromagnetic waves growing from the concepts and experiments of Faraday, Henry, Maxwell, Hertz, and Marconi. Long range radio propagation had stimulated the imagination of Kennelly and Heaviside to envisage an electrified reflecting region of the atmosphere to support such radio transmissions.

It was with this background, and with the encouragement of Dr. John A. Fleming, director of the Department of Terrestrial Magnetism, that Breit and Tuve devised a direct means of "seeing" this ionized region of the outer atmosphere. And so the pulse-echo experiment was developed whereby a pulse of radio waves of a few hundred microseconds duration was transmitted upward and its echo was observed. From the time of travel of the pulse, the frequency of the wave, and the characteristics of the echo--"the earmarks" left upon them by the ionosphere--could be deduced the height, density, distribution, and nature of the electrified layers which were explored by the pulse.

Experiments in geophysics are generally distinguished from those of laboratory physics by their geographic scale and by the limits on control which the experimenter can use to simplify his experiment, thus clarifying the interpretation of his observation. The geophysicist must examine nature as he finds it, and infrequently does he find an exact means of simulating a suitable counterpart for his experiment, on which other related and complicating phenomena of nature are not irrevocably superimposed.

Then the geophysicist must extend his experiments in space over the surface of the Earth, and continue them in time until the several superimposed natural phenomena can be separated exactly by the theory of probabilities. Only then can he establish the reality of some element of a complicated phenomena as it occurs in nature, comprehend the cause, and define the nature of the effect. This is an imposing task when the periodicity of important phenomena is the sunspot-cycle of 11 years.

Investigation of the ionized outer atmosphere--the ionosphere--is characteristically a geophysical problem in both space and time. From the pulse-echo experiment of Breit and Tuve, observatory techniques to provide for ionospheric measurements at remote locations for long intervals of time with great reliability were developed by Berkner and Wells. The records were arranged for fast and exact reduction of their data to numerical tabulations from which the individual phenomena could be isolated by the methods of probability. The tool in this technique which permits these detailed deductions is the magneto-ionic theory based on Lorentz "Theory of Electrons," and developed for the special case of the ionosphere by Appleton, Breit and Tuve, Booker, and others. The principal features of this theory have been adequately confirmed by many direct experiments.

The early apparatus provided for continuous recording of virtual height at a single frequency. But as quickly as technological problems could be conquered, multi-frequency methods of recording were introduced which provided for complete and nearly simultaneous recording of the principal characteristics of the whole ionosphere as it was visible to radio waves sent from the ground. Multifrequency methods provided for a succession of records made over short intervals of time. During each time interval, pulses were successively transmitted at incremental changes of wave frequency over the whole significant range of radio frequencies, and the echoes were faithfully recorded. This method produced a succession of complete records of the ionosphere; from each record the important aspects of the ionosphere could be deduced, and from the succession of the records came the time variation of important features over hours, days, years, and the sunspot-cycles.

It is this powerful technique used with this interpretive tool which leads to the data contained in this volume. When the first observations over the whole significant range of radio frequencies were made at the Kensington Experimental Station of the Department of Terrestrial Magnetism beginning in 1935, methods of reduction of the data to effective tabulations were studied. To a substantial extent, the pattern established for reduction of data of magnetic observatories provided a basis, for the analyses to be done were not dissimilar. As special phenomena were observed, the abbreviations and symbols now so widely used to describe them were adopted. These methods of reduction and the symbols were adopted for world-wide

use in substantially their original form at the International Wave Propagation Conference at Washington in 1944.

The development of the pulse-echo experiment into this technique of recording and tabulation forms the foundation for the world-wide net of ionospheric observatories which are appearing over the surface of the globe. The first step in global studies of the ionosphere (beyond observation at the well-established laboratories at Washington and London) came with the installation of ionospheric equipment for continuous observation and recording at the observatories of the Department of Terrestrial Magnetism at Huancayo, Peru, and Watheroo, Western Australia. Since the volumes for the two observatories are being published separately, we have thought it best for the convenience of readers to provide in both volumes a full explanatory description of the methods and equipment.

Acknowledgment is made of the assistance and co-operation of officials of the Peruvian Government, especially those of the Post Office Department, facilitating the establishment of the ionospheric program at the Huancayo Observatory. The program at the Watheroo Observatory was carried out with the co-operation of the Chief Radio Inspector, Wireless Branch, Postmaster-General's Department, Melbourne; Radio Inspector, General Post Office, Perth; Sir John Madsen, Radio Research Board, Sydney; Commonwealth Department of Air, Melbourne; and the Australian Radio Propagation Committee, Sydney. During the war period, 1942-1946, the observational program was expanded under war contracts NXS-11605 and NXsr-33809.

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IONOSPHERIC RESEARCH AT HUANCAYO OBSERVATORY, PERU
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INTRODUCTION

Continuous operation of multifrequency ionospheric recorders at Huancayo Magnetic Observatory, Peru, and Watheroo Magnetic Observatory, Western Australia, has resulted in a homogeneous series of data extending over a period of nearly ten years. Many analyses have been completed and published in technical journals by members of the staff of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington and by other investigators who have had access to the basic data. It is recognized, however, that the scientific value of the ionospheric data has by no means been fully exploited. Many of the hidden truths of geophysical or solar-terrestrial relationships will be uncovered only after longer series of data become available for analysis. It is with these facts in mind that the available ionospheric data from the observatories of the Department of Terrestrial Magnetism are presented. It is hoped that the availability to all investigators of the complete series of data will stimulate further study and produce results leading to a better understanding of the ionosphere and related phenomena.

DESCRIPTION OF OBSERVATORY AND IONOSPHERIC PROGRAM

Ionospheric research was initiated by the Department of Terrestrial Magnetism of the Carnegie Institution of Washington at the Huancayo Magnetic Observatory, Peru (latitude 12° 0'.7 south, longitude 75° 20'.4 west), in 1932. The close relationship between ionospheric and magnetic research made the Huancayo Magnetic Observatory a particularly appropriate location in view of the programs of magnetic and related observations which were already well-established. Many of the same factors which led to the establishment of the magnetic observatory at the magnetic equator [1] have been of primary importance in the ionospheric program.

The observatory (see Figure 1 at end of text) is located in the Peruvian Andes at an elevation of 11,000 feet above sea level. The valley or plateau which includes the native village Huancayo is approximately 10 miles wide by 50 miles long. Huancayo is the terminus of the highest standard-gauge railway in the world which climbs from Lima to cross the continental divide at nearly 16,000 feet before dropping down to the observatory valley on the Atlantic watershed. Equipment and supplies were originally transported a distance of ten miles from Huancayo to the observatory by horse or pack train. However, improved roads and transportation have made the observatory readily accessible by automobile.

The observatory is of necessity a complete operating unit, providing, in addition to the research facilities, modern living quarters for the technical staff, gasoline and Diesel electric generators for power and lighting requirements, water and disposal systems, and maintenance workshops.

The program of ionospheric research at Huancayo Magnetic Observatory has progressed through three stages: (1) manual measurements with manual plotting of observations; (2) continuous recordings on a single (or fixed) frequency supplemented with manually adjusted multifrequency observations at regular intervals; (3) continuous automatic multifrequency recordings. Although the need for continuous automatic multifrequency apparatus had been apparent for some years, an installation did not become feasible until the completion of development of a suitable instrument at the Department of Terrestrial Magnetism in 1936. This development was complicated by the magnitude of engineering problems involved--both electrical and mechanical--and the limitations of electronic tubes available at the time. Three identical ionospheric recorders of suitable design were constructed and installed at Huancayo Magnetic Observatory, Peru, in 1937, at Watheroo Magnetic Observatory, Western Australia, in 1938, and at the University of Alaska, College, Alaska, in 1941.

The following sections are devoted to a discussion of techniques for ionospheric measurements, a detailed description of the design of the Department of Terrestrial Magnetism automatic recorder, a discussion of the interpretation and analyses of records, a survey of results, and the presentation in tabular form of ionospheric data collected since the installation of the automatic equipment. Although design of the apparatus is now obsolescent in view of recent developments in the electronic arts, it seems desirable to describe rather fully the construction and functioning of the equipment which has produced the long series of data here presented. The validity or accuracy of these data are in no manner impaired by improved techniques for ionospheric research, for the methods of calibration and control are at least equal to those employed in any modern equipment.

BASIC PRINCIPLES OF IONOSPHERIC RESEARCH

Structure of Ionosphere

The ionosphere is the gaseous envelope which surrounds the Earth above the stratosphere. It extends from approximately 40 kilometers to 1000 or more kilometers above the Earth. Figure 2 (courtesy of the Central Radio Propagation Laboratory) is a conception of the ionosphere with shading to indicate relative density of ionization. The figure also shows comparative heights of rockets, aurora, meteors, and balloons (1947). Free ions and electrons produced by the Sun's radiation within the ionosphere provide regions which reflect radio waves of certain wave frequencies back to Earth. This characteristic makes it possible to explore the ionosphere by means of radio waves and to gather basic knowledge of its structure and behavior.

Ion distribution in the sunlit hemisphere of the ionosphere is presented in Figure 3. It is seen that three

general regions of ionization exist under the direct rays of the Sun. These are the lower, or E-region (height approximately 100 kilometers); the intermediate or F1-region (height approximately 200 kilometers); and the highest, or F2-region (heights from approximately 250 kilometers upwards). Toward sunrise or súnset and at the higher latitudes, the F1- and F2-regions merge into a single F-region as the zenith angle of the Sun becomes large. Although the diagram is oversimplified, it illustrates the basic structure.

Figure 4 demonstrates paths of radio waves of different frequencies in exploration of the ionosphere. The density of shading represents electron density. The low-frequency waves penetrate only to low heights before encountering sufficient ionization to bend them back to Earth. Waves of somewhat higher frequencies penetrate to greater heights, and waves of still higher frequencies pass completely through the ionosphere.

A radio wave transmitted vertically upward is returned when it encounters a certain density of ionization determined by the wave frequency. The relation between frequency of the wave f, and the equivalent electron density N, required for its reflection at vertical incidence in absence of a magnetic field as derived from the magneto-ionic theory is given by

$$N = kf^2 \tag{1}$$

When f is given in mc/sec, k becomes 1.24×10^4 when the Lorentz correction is neglected. The maximum electron density for any ionospheric layer is established by the wave frequency which just penetrates through that layer. This is known as the "penetration" or "critical" frequency of a layer.

The existence of the Earth's magnetic field in the ionosphere results in a "Zeeman" effect and causes the single incident wave to be separated into two wave components having different critical frequencies. These are known as "ordinary" and "extraordinary" wave components. When the "layer structure" is sharply defined, the echoes from the components arrive superimposed, but they become resolved at or near the critical frequencies when one wave component is retarded more than the other. Thus the branch of the record which represents the "extraordinary" component is displaced toward higher frequencies by an amount depending on the intensity of the Earth's magnetic field. Therefore, the separation between ordinary and extraordinary wave critical frequencies gives a measure of the intensity of the Earth's magnetic field in the ionosphere.

Pulse Technique

The pulse technique of Breit and Tuve [2] has been used exclusively in all measurements. A series of short pulses of radio frequency energy are transmitted and the time required for the signals to travel from Earth to ionosphere and back is accurately measured. The velocity of propagation of radio waves is known to be equivalent to velocity of light waves (3×10^{10} cm/s). Hence the round-trip distance between Earth and ionosphere is

$$Vt = 3 \times 10^5 t \tag{2}$$

In terms of equivalent height (h) of a reflecting region when the measurements are made with receiver and transmitter located essentially side-by-side:

$$h = d/2 = 15 \times 10^4 t \tag{3}$$

or

$$t = h/15 \times 10^4 \tag{4}$$

where h and d are in kilometers, t in seconds. From (4) the time delay between signal and ionospheric echo is determined for an equivalent height. This is demonstrated in Table 1 for heights ranging from 50 to 1000 kilometers. The above relationship is obviously limited to vertical-incidence measurements and does not hold if receiver and transmitter are separated over a base line longer than a few kilometers. In practice, the accurate time-scale is calibrated to read directly in terms of equivalent height in kilometers.

Table 1. Time delay between signal and ionospheric echo

Equivalent height	Time delay	
km	seconds	milliseconds
50	3.33×10^{-4}	0.333
100	6.67×10^{-4}	0.667
200	1.333×10^{-3}	1.333
300	2.000×10^{-3}	2.000
400	2.667×10^{-3}	2.667
500	3.333×10^{-3}	3.333
600	4.000×10^{-3}	4.000
700	4.667×10^{-3}	4.667
800	5.333×10^{-3}	5.333
900	6.000×10^{-3}	6.000
1000	6.667×10^{-3}	6.667

Pulse Length

It is apparent from inspection of Table 1 that, in order to register echoes from a height of 50 kilometers, the receiver must fully recover from each pulse in less than 0.333 milliseconds. This condition determines the time required for pulse-length plus receiver recovery for any minimum effective recording height. (In the early designs of apparatus, it was much simpler to generate a pulse of relatively short duration--say, 50 to 100 microseconds--than it was to incorporate a rapid recovery rate into the receiver.) A pulse-length of 100 microseconds leaves 233 microseconds for receiver recovery when a 50 kilometer minimum height is assumed. Other factors affecting pulse-length, such as resolution required between reflections arriving at nearly the same time, are discussed in later sections of this volume.

Pulse-Repetition Frequency

The fastest practical rate of pulsing is determined by the maximum range of the recorder. Assuming a 1000 kilometer maximum range for which time delay (Table 1) is 6.667 milliseconds, it is found that a pulse-repetition frequency of 150 per second ($1/6.667 \times 10^{-3}$) is the maximum permissible. Any faster rate would result in an overlap on the recording screen between pulses and echoes from preceding pulses. Other limitations on pulse rate in multifrequency recorders will be discussed in a following section. For most ionospheric research, pulse rates are kept to a much lower value to reduce interference to other services in the radio-frequency spectrum. Pulse rates of 10 or 15 per second are used in the observations described herein.

AUTOMATIC MULTIFREQUENCY EQUIPMENT FOR IONOSPHERIC MEASUREMENTS

Basic Requirements

At normal incidence, radio waves of different frequencies penetrate to levels of different ion-density. To obtain the distribution of ion-density with respect to height, the frequency of the exploring radio transmission must be varied, continuously, through a wide range depending upon the limiting constants of the ionosphere. The ionization of the upper atmosphere undergoes rapid and irregular changes. Previous methods of ionospheric research did not provide the continuity and completeness of detail necessary to a most thorough understanding of these phenomena [3]. Such methods provided only for measurements or records on a single frequency, on a series of single frequencies by a cumbersome manual technique, or continuously over a restricted band of frequencies. The automatic, continuously recording, multifrequency equipment developed by the Department of Terrestrial Magnetism, Carnegie Institution of Washington, has overcome most of these difficulties. Complete data are obtained with only the nominal supervision of an operator.

Such an equipment involves transmission through much of the useful radio spectrum and possesses the following characteristics: (1) ability to record successfully without interference to or from existing radio services; (2) relatively uniform vertical radiation throughout the frequency range; (3) automatic interlocking of transmitter- and receiver-tuning; (4) mechanical simplicity; (5) uniform limits of precision and resolution. Each of these factors inherently involves certain features of the others; a successful equipment must depend upon a series of compromises. The design of the equipment requires an understanding of these factors and the utilization of methods and devices which permit the most satisfactory compromise.

General Description

The equipment consists of a radio transmitter and receiver located together, both utilizing the same antenna system and tuned circuits, and a suitable recorder. The method is fundamentally that of Breit and Tuve [2] wherein a radio-frequency pulse of short duration is transmitted and the time-retardation of the reflections is recorded. The transmission-frequency is changed continuously so that a complete sweep through a frequency range from 16.0 to 0.516 mc/sec is repeated every few minutes, providing a continual record of the constants of all regions of the ionosphere. A general view of the complete equipment is shown in Figure 5.

The basic arrangement of the components is shown in Figure 6, which is a block-diagram showing the connections of the various units. This arrangement permits transmitter and receiver to be locked precisely in tune at all frequencies. A single variable oscillator serves for both the transmitter and the receiver, as suggested by Gilliland [4].

In describing the operation, let f_I be the frequency to which the intermediate-frequency amplifier is tuned and let f_v be the variable frequency radiated and received at the antenna. Then to generate f_v, we select a frequency for the variable frequency oscillator (VO), its frequency f_{VO} such that

$$f_{VO} = f_v + f_I \quad \text{or} \quad f_{VO} = f_v - f_I \tag{5}$$

This oscillator excites the suppressor grids of the fully balanced, Class B modulator (M). The control grids of this modulator are excited by the intermediate-frequency oscillator (I), which has a fixed tuning, and operates at a frequency of f_I which is identical to the frequency to which the intermediate amplifier is tuned. The output of the fully balanced modulator contains only the two side-band frequencies which are

$$f_{VO} + f_I \quad \text{and} \quad f_{VO} - f_I \tag{6}$$

The frequencies f_{VO} and f_I are completely suppressed by the fully balanced modulator.

The frequencies in the output-circuit of the modulator will then be, from equations (5) and (6)

$$\begin{aligned} f_{M1} &= f_{VO} + f_I = f_v + f_I + f_I = f_v + 2f_I \\ f_{M2} &= f_{VO} - f_I = f_v + f_I - f_I = f_v \end{aligned} \tag{7}$$

These two side bands f_{M1} and f_{M2} are therefore separated by an amount $2f_I$. The intermediate frequency f_I is approximately 500 kc so that the separation of the two side bands is about 1000 kc. The side band f_{M1} is readily suppressed in the tuned-tank-circuit of the modulator which has a variable tuning and is adjusted to pass only frequency $f_{M2} = f_v$ to the power amplifier.

The first detector, which is also a fully balanced modulator, is arranged so that it will pass no energy when the power amplifier is excited, recovering in about 10^{-4} second after the excitation is stopped. These are tubes of the transmitter type with the requisite grid-insulation and construction to withstand transmitter voltages. The power-amplifier tank is tuned to frequency f_v and forms a tuned circuit for both the transmitter-output and the receiver-input.

The received signal is also of frequency identically f_v and is applied to the control grids of the first detector. The second grids of these tubes are excited from the variable-frequency oscillator (VO) which also excites the modulator. Therefore no matter what value is assigned to f_{VO} of the oscillator, and the corresponding wave frequency of radiation f_v, the output of the detector will contain the frequency

$$f_{VO} - f_v = f_v + f_I - f_v = f_I \tag{8}$$

This is the intermediate frequency which is amplified in the usual manner by the intermediate-frequency amplifier. Since all of the reflections which are recorded are received within 12 milliseconds after the transmitted pulse, the effect of detuning because of the changing frequency of oscillator (VO) during this interval is not serious. This factor does, however, limit the rate of sweep of frequency over the band, as is shown later.

To maintain the receiver and transmitter in tune, the only condition imposed is that the fixed-frequency oscillator f_I be tuned to the intermediate-frequency amplifier, a condition easy to fulfill.

The intermediate-frequency oscillator is "pulsed" through a keying amplifier by means of an electromagnetic device generating a sinusoidal pulse. This is generated by rotating a thin segment of "hypernik" through an unsaturated laminated "hypernik" core so that the flux in the core is changed for a short period as the segment is rotated through the core, in the manner of an ordinary electrical generator. A pulse is induced into a

coil wound around this core. The intermediate-frequency oscillator operates only during the instant that the pulse is transmitted; it is inoperative while the receiver is sensitized to receive the echoes.

A fast automatic volume-control is incorporated in the intermediate-frequency amplifier which has a time constant of about 10^{-4} second to prevent oscillations of excessive amplitude in the amplifier. In addition, a slow automatic volume-control, which integrates over 2×10^{-2} second, adjusts the sensitivity of the amplifier in accordance with the noise-level encountered, so that the records are not destroyed during periods of excessive noise. The equipment will record with a minimum input-signal of about 2×10^{-6} volt. A diode rectifier operates a fully balanced direct-current amplifier which in turn operates the oscillograph.

The general arrangement of the photographic recorder, shown in Figure 7, is similar to that described by Gilliland and Kenrick [5]. A permanent magnet, Dudell type oscillograph-element is used, although a cathode-ray tube could be used with equal facility. The galvanometer is normally operated with a bias such that the deflection is negative. The pulse merely reverses this bias so that the restoring force of the galvanometer assists in its initial acceleration, giving somewhat faster operation than with conventional operation, to provide for the short pulse-lengths used.

The camera is driven by a synchronous motor and has an adjustable speed through a reduction gear. Recording is done on photosensitized paper having a width of 12 cm so that scalings may be made without magnification of the trace. A vertical resolution of about 0.66 cm/100 km is ordinarily used. A speed giving about 60 cm of record per hour is found most useful. The optical system includes a spherical lens which is focused on the recording slit of the camera. This lens is placed so that the oscillograph must deflect to about two-thirds normal amplitude before the beam falls on the lens; the last one-third of the deflection is focused on the recording paper. A resistance-capacity filter is placed between the output of the intermediate-frequency amplifier and the recorder so that steady signals cannot deflect the element more than one-half normal amplitude. In this way much unwanted interference is avoided since it does not reach the spherical lens.

Successful recording is accomplished because reflection patterns are not random and form a coherent trace on the paper; noise and modulated interference, which pass the filter, are random and therefore incoherent on the record, merely causing some fogging. Recording is possible at all times even though the received low-level pulses may be entirely inaudible through noise such as that experienced during local thunderstorms.

Factors of Design

Before the automatic features are discussed, certain factors controlling the design must be considered. A pulse-duration of about 100 microseconds is used. This is necessarily a compromise; the maximum length is limited by the resolution required between reflections arriving at nearly the same time as is often the result of double refraction (vertical resolution); the minimum length is limited by the band-pass restrictions on the intermediate-frequency amplifier determined by the limitations of incoming interference, by the required fidelity of reproduction of reflection, by the necessity for restricting the frequency spread of transmitted side-band energy to prevent interference to other services, and by the requisite resolution of critical-frequency phenomena which become indistinct when the radiation embraces too wide a band of frequencies (horizontal resolution).

The minimum time of sweep through the band is controlled by the pulse-repetition frequency, the width of the band, the allowable frequency change between pulses, and the allowable detuning of the receiver from the transmitted frequency between pulses. To sweep the required frequency range in time T, the frequency must be changed by an amount, Δf, between pulses. If N pulses are transmitted per second, the time between the commencement of successive pulses is given by $\Delta t = 1/N$. Suppose the frequency, f, at any time during the sweep to be defined by a function

$$f = F(t) \tag{9}$$

then

$$f = \int_0^{\Delta t} dF(t) \tag{10}$$

The most general expression for F(t) must involve the determination of three constants depending upon the limits of the frequency range to be swept and the time rate of change of frequency. Two of the necessary equations are formed through substituting in equation (9) the value of f_{max}, the highest frequency, and f_{min}, the lowest frequency of the range. The assignment of values to Δf_{max} and Δt_{min} yields a third equation

$$(df/dt)_{max} = \Delta f_{max}/\Delta t_{min} \tag{11}$$

The minimum time required for a sweep therefore depends upon the values assigned to f_{max}, f_{min}, Δf_{max}, and Δt_{min} for any form of F(t).

The upper limit of the frequency range must be a frequency above which it is improbable that reflections will be returned at vertical incidence. At night, reflections can be observed on indefinitely low frequencies, although the reflections are observed usually from the 100-km level on a frequency of about 0.5 mc/sec. Because of the location of the international distress band on this latter frequency, the frequency band of 0.516 to 16.0 mc/sec was selected.

For a given band, equation (11) must be maximized for the most rapid sweep. The value of Δt is limited, however, by consideration of interference to existing services. Pulse-frequencies over 20 per second constitute a coherent sound, and, as a consequence N was limited to about ten pulses per second.

The maximum value of Δf_{max} is kept low to prevent progressive detuning of receiver, although this is not ordinarily a limiting factor. To define properly the complex pattern of a critical frequency at low frequencies, such as is often observed in a band of 50 kc, about 100 discrete pulses are required. This requires that Δf be about 0.5 kc/sec/pulse at low frequencies. This requirement is not so severe at the higher frequencies, because of the broader character of the critical frequencies. Here a value of about 3.0 kc/sec/pulse is acceptable.

The rate of frequency change must allow the production of a trace which is satisfactory for scaling. If the percentage accuracy of the scaling is to be constant, the frequency must be changed along a record moving at a uniform velocity by

$$q \log f = \ell \qquad (12)$$

where q is a constant and ℓ is the distance along the recording paper. Let p be the percentage accuracy of the frequency which should correspond to an uncertainty of ℓ' as scaled on the record. Then

$$\log (1 + p)f - \log f = (1/q)\ell'$$

from which

$$q = \ell'/\log (1 + p) = \ell'/(1 + p), \text{where p is small} \qquad (13)$$

then

$$\ell = [\ell'/(1 + p)] \log f_{max}/f_{min} \qquad (14)$$

This expression gives the length of record such that the uncertainty of frequency corresponds to the uncertainty of scaling. If it is assumed that the frequency stability of a well-designed oscillator is 0.2 per cent when operated over long periods of time, and that the record can be measured to 0.1 mm, length of record of about 15 cm is necessary from the above expression to provide the necessary accuracy in scaling a single sweep of the frequency band. When the light beam is sufficiently narrow to delineate complex patterns, not less than 300 pulses/cm are necessary to expose the recording paper completely. The minimum time for the entire sweep for proper film exposure, horizontal resolution, and accuracy of scaling is therefore limited to about 7.5 minutes for N = 10. The maximum value of Δf must be consistent with this minimum time.

It is not practical to use the ideal law for frequency change given by equation (12). Not only must the absolute value of frequency be measured, but also the difference-frequencies, as is the case in measuring the separation of critical frequencies due to double refraction. Because of the tendency of an oscillator to drift off frequency in the same direction throughout the band due to some single cause, the relative separation of two adjacent frequencies is known to a much greater accuracy than is the precision of the absolute frequency. It is desirable that frequency separations be measured with approximately the same accuracy over the whole scale. For this purpose, a linear frequency scale would be most suitable. Such a scale would have the following disadvantages: (1) nonuniform absolute accuracy; (2) crowding of frequency scale below 2000 kc where reflections are observed at practically all times, with expansion of the high-frequency scale where reflections are observed only during exceptional conditions, leaving much unused film under ordinary circumstances; (3) too much time per sweep required if necessary accuracy of scaling is to be obtained at low frequencies; (4) increase in difficulty of the problem of design, as is made clear in subsequent discussion.

A square-law scale is a logical compromise between the two extremes. Such a scale leaves the higher frequency scale sufficiently open to observe unusual conditions with some accuracy, and at the same time yields the requisite accuracy at the lower frequencies where reflections are always observed. The frequency sweep is made to travel from high to low frequencies to eliminate certain mechanical difficulties in the equipment attendant on tuning of antenna and is expressed by

$$f = k[(T - t) + C]^2 \qquad (15)$$

With the values of f_{max} = 16,000 kc/sec, f_{min} = 516 kc/sec, N = 10 pulses per second, and Δf_{max} = 3.0704 kc/sec, the constants evaluated from equation(10) and (11) are

$$\begin{aligned} kc^2 &= 516 \\ k(T + c)^2 &= 16{,}000 \qquad (16) \\ 2k(T + c) &= 30.704 \end{aligned}$$

for which the solution is T = 855 seconds, k = 0.014731 kc/sec, and c = 187.18 seconds.

The entire frequency range from 516 to 16,000 kc is divided into six bands, each requiring 142.5 seconds to traverse, with 7.5 seconds between bands for switching. Thus one sweep requires just 15 minutes for completion. During the switching period, no pulses are emitted. These bands, as determined from equation (15) are given in Table 2.

Figure 8 shows the value of frequency at any time during the frequency sweep. Figure 9 shows the rate of change of frequency with respect to frequency or time, and the change in frequency in kilocycles per pulse at any frequency in the range. Selection of these bands is

Table 2. Frequency bands

Band	Frequency range in kilocycles
1	16000 - 11924
2	11924 - 8446
3	8446 - 5566
4	5566 - 3284
5	3284 - 1610
6	1610 - 516

based upon the engineering requirements of condenser-tuned circuits. Ordinarily, the frequency range of such a circuit is limited to about three to one. If the output is to be maintained reasonably uniform, the squared-frequency scale lends itself to the most economical selection of bands.

Mechanical Control

Figure 10 shows that only four variable tuning controls are required for both the transmitter and receiver. These are variable capacitors in each case. Associated with each variable tuning control is a selector switch which introduces the proper values of L and C into the circuit for each band.

A selector panel, shown in Figure 11, is located at the bottom of a relay rack and provides the entire mechanical control for the equipment. The units which have the variable tuning are mounted above the selector. The main camshaft of the selector panel is driven continuously at 0.4 revolution per minute by a 1/75 horsepower synchronous motor through a reduction gear; this shaft rotates 24 cams in four groups of six, each group corresponding to one variable tuning control. Twenty-four short cam followers, one following each cam, have vertical motions which are determined by the shapes of the cams. Above each group of six cam followers is a rotary cam selector having an arm as shown in Figure 12. This

arm is capable of both rotary and vertical motion. It has six positions, 60° apart; each position corresponds to the selection of one of the six cam followers in its group. The vertical motion of a selected cam follower causes the cam-follower selector to rise with a motion determined by the shape of the cam. This rotates the variable capacitor, providing the proper tuning. At the end of the frequency band, the cam followers drop and the four cam-follower selectors rotate, selecting a new set of four cam followers. In this way a new set of cams is selected for each band.

The cam-follower selector is motor driven and operated through a switching device of special design. Any band sequence car be set up through merely operating any combination of a series of six switches. Slight changes in positions of the selector arm, due to change in frictional force, are not cumulative. The selector-arm drive shaft also operates the selector switches in the four tuning units by means of a direct chain drive to each unit. The entire assembly of an experimental multifrequency equipment is shown in Figure 5. The units are arranged as shown in Figure 6, with the receiving equipment and power units on the right.

The design of a radio-frequency band switch is shown in Figure 13. The switch has six positions corresponding to the six bands and the switch cams can be readily cut into any desirable shape to provide for practically any combination of contacts in each position. In addition, each switch is equipped with back-contacts so that unused inductors are grounded. The design of these switches is an important feature in successful operation of the equipment. The variable capacitors are sectionalized so that the total capacitance available is changed for different bands, providing for rotation through the full 180° in each band, which is necessary if requisite frequency calibration is to be maintained.

Antenna Arrangement

The details of the antenna-tuning network are shown in Figures 10 and 14. Capacitor sections may be put either in series or in parallel so that the total condenser reactance corresponds to the required values in any part of the frequency range. It can be seen that resonance of the output tank can be obtained for an infinite number of settings of the tank condensers. Therefore, the ratio of these capacitances can be adjusted by the cam motion so that the impedance at the sending end of the transmission line is matched to the output tank both as to scalar magnitude and phase angle at all frequencies.

Two antennas are used to maintain high-angle radiation throughout the range. Antenna 1 is used for bands one to four (16,000 to 3,284 kc), inclusive, and is 30 meters in length. Antenna 2 is used in bands five and six (3,284 to 516 kc) and is 125 meters in length. Both antennas are in the form of horizontal doublets with 550-ohm transmission lines connected to the centers. Matching between the transmission lines and the antennas is evidently impracticable, in so far as scalar values of the impedance are concerned, while the reactance is taken up in the antenna-tuning network at the transmitter. To reduce the antiresonant impedance of the antenna, each arm of the doublet is of the form of a cage of diameter about two meters. The antiresonant resistance of such a doublet at the center is given very closely by the expression

$$R = Z_0^2/R_L \tag{17}$$

where R_L is the radiation resistance and Z_0 is the surge impedance of the doublet. If, for example, a No. 10 Brown and Sharpe gage doublet antenna is compared to the 2-meter cage doublet antenna, the antiresonant impedance of the cage is about 3000 ohms as compared to about 30,000 ohms for the No. 10 wire, with some variation depending upon the other dimensions of the antennas. The mismatch between the transmission line and the antenna is not serious in this case, never exceeding about 5:1 either way. Similarly, it is practicable to match the antiresonant resistance of 3000 ohms into the power-amplifier tank efficiently. Likewise the reactance is correspondingly reduced so that the tuning-matching arrangement is feasible.

Calibration

The basic calibration of the records, for both wave frequency along the abscissa and height along the ordinate, depends on the accurate measurement of time. This is achieved through control of the frequency of the electrical power. Where commercial power is used, it is required that its frequency be maintained within certain small limits. At field stations where no adequate source of commercial power is available, direct current is generated and converted to alternating current by a motor alternator. The frequency of this alternating current is controlled by a temperature-compensated 60-cycle tuning fork.

To obtain proper frequency calibration along the abscissa of the record, the maximum cam rise is 100 mm which, when coupled to a disc having a periphery of 200 mm, provides for capacitor rotation of 180°. It is possible to grind the cams to 0.1 mm, thus providing a mechanical calibration accuracy of one part in 1000. The oscillator is designed to operate within these limits. Frequencies are repeated for given cam positions on successive runs to well within one part in 10,000. The calibration on the automatic tuning unit provides for cam settings of one part in 1000. To obtain the proper shape of cam, the calibrated readings of the dials on the four tuning units are obtained directly from a dial reading 0 to 1000. This calibration corresponds exactly to the rise of cam in tenths of millimeters.

Noninterference of Emission

It is essential that for successful operation there must exist no interference whatsoever to radio service. That this is the case is apparent from a review of the following details of design:

(1) The emission is a short pulse of 1/10,000-second duration. One such pulse is emitted each one-tenth second. On an average, the frequency sweeps at the rate of about 900 kc or more per minute so that the frequency advances on an average of 1.5 kc between each pulse. On an average about five pulses occur in any channel.

(2) One complete sweep of frequency is made in 15 minutes. Therefore, the pulses are repeated in any channel only at intervals of about 15 minutes.

(3) The antenna is a high-angle radiator with little low-angle radiation. Therefore, to even a nearby receiver located just outside the induction field of the antenna, the

ground wave is inappreciable. Such a receiver is thus at an equivalent distance of not less than 200 km from the equipment (the lowest layer is about 100-km height).

(4) The average radiated power of the equipment is 0.64 watt, and the peak power of any pulse is about 800 watts. Therefore, the power involved is much less than that of most existing services. Only sufficient power is used to permit discrimination between echoes and atmospheric noise. The level of the received pulse is often down into the atmospheric noise-level so that discrmination depends on photographic repetition of pulses superimposed on random noise.

(5) The pulse is of very short duration and as nearly sinusoidal in form as possible so that the side-band energy occupies a restricted band. The side-band frequency of the pulse is greatly attenuated by all receivers except those especially designed to receive it because of their narrow band widths.

(6) The pulse-frequency (ten pulses per second) is so low that it does not constitute a coherent "sound" as defined in audio-frequency parlance. This pulse rate has been made the minimum consistent with the rate of frequency-change, any lower rate materially affecting the completeness of the record.

(7) The emission can be received continuously only on a special receiver whose frequency is changed with the frequency of the transmitter. The pulses and their side bands will be actually emitted in any channel for a total time of only 0.0003 to 0.0005 second during the period of less than one-half second that the equipment-frequency is passing through the channel. This will be repeated once each 15 minutes. Thus the emission, to a receiver adjusted to the threshold of maximum sensitivity, will sound about like a watch ticking in any channel for less than one second in each 15 minutes.

After exhaustive tests and inspections by the engineering staffs of the United States Federal Communications Commission to determine whether interference to existing radio services would result, it was found that interference does not occur. License was granted for development and operation at the Department of Terrestrial Magnetism experimental station near Kensington, Maryland, within a few miles of governmental, commercial, and broadcast activities. The Kensington Experimental Station was abandoned in 1945 because of real estate development in the area, and a new experimental station near Derwood, Maryland, was completed in 1947, providing greatly increased facilities for all types of upper atmospheric research.

IONOSPHERIC RECORDS AND ANALYSES

Examples of Records

Typical examples of ionospheric records obtained with the apparatus described in the preceding section are given in Figures 15 and 16. In each case, the upper portion of record is reserved for continuous recordings on a fixed frequency, 4.8 mc/sec, while the multifrequency record occupies the lower portion. Time-scale progresses from right to left and frequency-scale changes from 16.0 to 0.516 mc/sec in the same direction. The scale of virtual height extends from 0 km at the bottom (the base line) up to 1200 km near the top of the record just below the base line for the fixed-frequency portion. Figure 15 was obtained in late afternoon hours under conditions when E-layer was well defined at frequencies below 2.2 mc while the F-layer was recorded at frequencies between 2.2 and 10.7 mc. The absence of an F1-layer is characteristic of evening and night observations. Two clearly defined multiple echoes are apparent at virtual heights two and three times that of the first trace. These represent signals that have completed the round trip between Earth and ionosphere two and three times, respectively.

The principal difference between Figures 15 and 16 is shown by the presence of an F1-layer in the latter record. This may be observed between 3.3 and 5.0 mc. Reference to the fixed-frequency portion shows that echoes are being recorded from both E- and F1-layers. This observation may be confirmed by comparison of the multifrequency records at 4.8 mc since the fixed-frequency records give a continuous cross-section of the ionosphere at that frequency. The difference between day and night conditions in the ionosphere is clearly shown in Figure 17.

The grey background of the records is produced by random noise or signals which cause the oscillograph light beam to deflect into recording position but do not leave a coherent trace. The occasional vertical dark lines are the result of interference from stations whose radio frequency carriers are modulating continuously at high level, such as broadcast stations.

Methods of Analyses

International Procedure for Analyses.--The procedure for analyses of ionospheric records was established on an international basis at the International Radio Propagation Conference at Washington, D. C., April, 1944. This procedure is substantially the same as that originally devised at the Department of Terrestrial Magnetism several years earlier when the techniques and procedures of ionosphere work were developed. The international procedure was officially adopted at the Huancayo ionosphere station July 1, 1944, and at the Watheroo station August 1, 1944, except in the case of one item, and entailed almost no revision of existing observatory procedures. The only significant changes in procedure affecting the presentation of data were the use of "median" rather than "mean" monthly values, and the use of brackets rather than parentheses to enclose interpolated hourly values. The use of brackets was begun at both observatories on the dates just given, but the taking of median monthly values was deferred at Huancayo until February 1, 1945, and at Watheroo until May, 1946. In the publication of the Watheroo data for May and June, 1946, median monthly values are replaced by mean monthly values, in order that all data for the years 1938 to 1946 might have similar treatment.

Adopted Procedure for Analyses.--(A) When observations are missing because of loss of trace due to failure of equipment for a total period of two hours or less, interpolation is made and indicated on the tabulation sheet by the interpolated value in brackets; when observations are missing for more than two hours, no interpolation is made.

(B) The following data are tabulated from the ionospheric records:

(1) f^oF2.--Critical frequency of ordinary wave component F2-region.

(2) h'F2.--Minimum virtual height of F2-layer.

(3) f^oF1.--Critical frequency F1-region. This is not reported unless there is a definite and abrupt change in the h'f curve either for the first reflections or for one of the multiples.

(4) h'F1.--Minimum virtual height of F1-region. This is recorded whenever f^oF1 is identified.

(5) f^oE.--Critical frequency of normal E-layer. This is reported only when there is group retardation seen at the E-region echo; when stratification or other ionization effects are observed between the E- and F1-layers, as often occurs, the appropriate symbol H, adopted by the International Radio Propagation Conference is to be used to identify the condition.

(6) f(min).--Lowest frequency at which reflections are recorded.

(7) Median values.--The monthly summary sheets of the preceding ionospheric characteristics are to report median rather than mean values for the monthly hour-by-hour or vertical summaries. Horizontal row summaries for the days of the month are not required. The median value of a characteristic is one that is exceeded 50 per cent of the time. One way of arriving at this median value is to arrange all values in order of magnitude and select the middle value of the series whenever the series contains an odd number of values; when the series contains an even number of values, it is conventional to take one-half the sum of the two values at the middle of the series.

Symbols.--The following symbols are used in preparing detailed tabulations of hourly values of ionospheric characteristics for all days:

( ) - Doubtful value because of scattering, instrumental deficiency, etc. This symbol can also be used when the characteristic cannot be definitely determined or interpreted because of limitations of instrument or method of observing.

[ ] - Interpolated value. The method of interpolation used should take cognizance of the normal trend of the characteristic considered. Linear interpolation is not adequate during intervals when the rate of change is high.

A or a - Characteristic not measurable because of blanketing by sporadic or abnormal E.

B or b - Characteristic not measurable because of loss of trace due to absorption, either partial or complete.

C or c - Characteristic not measurable because of loss of trace due to failure of equipment.

D or d - Critical frequency higher than upper frequency-limit of recorder.

E or e - Critical frequency less than lower frequency-limit of recorder.

F or f - Spread-echoes present. If spread-echoes obscure the characteristic, no numerical value is to be given.

G or g - f^oF2 equal to or less than f^oF1. This symbol also should be used with the characteristics describing the condition when the ionization of the F2-layer is only slightly above that of the F1-layer and there is only a very small separation in frequency between the two traces and an abnormally great virtual height for the F2-layer is recorded.

H or h - Stratification observed within the region.

J or j - Ordinary-wave critical frequency deduced from measured extraordinary-wave critical frequency.

K or k - Ionospheric storm in progress. Optional for stations desiring to indicate certain hourly values in this manner.

M or m- F1-layer not measurable with accuracy because of proxmity of F2-layer.

Tabulations.--When ionospheric data are scaled in accordance with the procedures outlined above, each observation is recorded on a tabulation sheet of the type shown in the section of tabulated data. Provision is made for 24 hourly values for each day of the month. The entry represents a measurement made approximately at the hour indicated. Symbols, whenever required to complete the description of an observation, are inserted in the same block with the scaled value. Tabulation sheets are essentially complete (a value for each hour) for ionospheric phenomena which are continuous, such as F-layer measurements. Tabulation sheets for other phenomena which are discontinuous, such as the daytime F1-layer, are complete only for that portion of each day when the characteristics are measurable. The absence of a measurement for any hour or period is explained by the appropriate symbol, the most frequent causes being equipment failure (symbol c), sporadic E ionization (symbol a), and high absorption (symbol b).

Values tabulated for any hour are not obtained exactly on the hour because the time of sweep of the recorder commences on the hour and terminates 15 minutes later. The exact time of any frequency value may be determined from further reference to Figure 8 which shows frequency versus time for one sweep. By application of this relationship, a correction may be applied for exact time of observation whenever analysis requires this precision.

SURVEY OF RESULTS

Probably the outstanding advantage of the ionospheric data from the Huancayo and Watheroo Magnetic Observatories, for purposes of analysis and research, is its long series of continuous, homogeneous observations. This feature alone has made it invaluable to many investigators throughout the world. Although a detailed discussion of ionospheric results and progress is beyond the scope of this publication, it is of interest to review some of the more significant contributions to knowledge of the Earth's upper atmosphere which have been realized either directly or indirectly from the ionospheric recording program of the Department of Terrestrial Magnetism. For more detailed information and specific author references, the reader is referred to the bibliography presented at the end of this volume.

Ionization in the several ionospheric regions is produced by solar ultraviolet radiation as the primary agent. Diurnal, seasonal, and 11-year cycles of intensity of

ionization are observed which closely relate ionospheric characteristics to the over-all intensity of solar ultraviolet radiation. The intensity of solar ultraviolet is directly proportional to sunspot numbers, and ion density in the E- and F1-regions increases approximately 40 per cent from sunspot minimum to maximum. In the F2-region, this over-all increase approaches 400 per cent. The change in F2-region ionization with change in sunspot number is shown in Figure 18.

Although the E- and F1-regions have simple seasonal variations with maximum ionization in local summer and minimum ionization in local winter, the F2-region is somewhat anomalous in nature. Minimum electron densities are observed in summer with maximum values in winter. If one recalls that the radio technique measures maximum density of ionization per cubic centimeter, some of this anomalous performance may be reconciled by the assumption that heating and resultant expansion play an important part in determining F2-region characteristics. In local summer the total ionization in a vertical column may be greater than in winter, but the ion density is less due to heating and expansion of the upper atmosphere. Seasonal changes are illustrated in Figure 19.

There is now substantial evidence that contours of F2-region ionization are distributed in close similarity to the contours of geomagnetic latitudes. Belts of maximum density exist about 20 degrees north and south of the geomagnetic equator. Intensities decrease rather rapidly toward the geomagnetic equator and decrease more gradually toward the higher latitudes.

The long series of ionospheric data from the Huancayo and Watheroo Magnetic Observatories were instrumental in revealing the recurrent nature of average monthly characteristics at yearly intervals. For example, the graph of f^oF2 at Huancayo for March, 1941, is remarkably similar to that for March, 1942, with the exception of a uniform offset dependent on the sunspot activity and over-all trend. When used in connection with the sunspot-cycle relationship, this characteristic establishes a basis for the forecasting of average ionospheric conditions up to a year or more in advance.

Similarly, the unique locations of the observatories resulted in data from isolated parts of the world which made possible the first approach to an understanding of world-wide characteristics of the ionosphere. Although E- and F1-regions were found to have uniform and predictable properties, the knowledge of anomalous and unpredictable properties of the F2-region in different parts of the world served as a stimulus for expanded programs of ionospheric measurements. The location of the Huancayo and Watheroo Magnetic Observatories in the present world-wide network of stations is shown in Figure 20.

Experimental confirmation of the magneto-ionic theory constitutes one of the major advances of ionospheric research. This theory provides the tool for exact measurement of equivalent electron densities at various levels. Let us consider some of the confirming evidence. For instance, theory predicts that a radio wave, propagated in the ionosphere in the presence of the Earth's magnetic field, will be split into two wave components. The behavior of these wave components will be more complex than that of the simple wave transmitted, and they will be propagated differently; one wave component will be reflected at a lower electron density than the other. Observation shows that two such components are returned, as has been discussed in preceding sections. Theory says that the wave frequency at which each component will penetrate a layer of ionization will differ by an amount which is a function of the intensity of the geomagnetic field. Observation shows this separation of the critical frequencies to be just the amount predicted. At Washington, the difference is about twice that at Huancayo where the geomagnetic field-strength is only half as great.

Also, theory states that at the magnetic equator, where the field is horizontal, the two reflected wave components will vibrate in mutually perpendicular planes, one along the field, the other perpendicular to it. Special tests were conducted at the Huancayo Magnetic Observatory (on the magnetic equator) which directly confirm this part of the theory. An antenna placed in the magnetic north-south plane receives only the ordinary wave component; in the east-west plane only the extraordinary component is received, while at any intermediate angle both components are observed simultaneously. The original experiments were conducted with manually operated equipment and were subsequently repeated with the same degree of success using automatic multifrequency apparatus. Records obtained during the polarization experiments are given in Figure 21. In these and other experiments, the reasoning of electromagnetic theory has been tested step by step until little doubt remains of its essential validity.

What evidence relating to geomagnetic diurnal variation can be obtained from the ionosphere? Only in regions where sufficient conductivity exists can there flow electrical currents to produce the geomagnetic change. Density of ionization alone is not sufficient. The contribution of each ion to the electrical conductivity must be considered. This depends on temperature and pressure of the atmosphere, on the masses associated with the changes, and on the strength of the geomagnetic field. All these taken together indicate that most suitable conditions for maximum current flow probably exist at a level around 70 or 80 kilometers above the Earth's surface. With improved experimental techniques plus the use of rockets for exploration of the outer atmosphere, it may be anticipated that the near future will provide more definite information on this point.

Ionospheric effects associated with geomagnetic storms appear predominantly in the F-region. During magnetic disturbance, the ionospheric effects are so varied as to defy complete description. The onset of a magnetic storm is often preceded by higher than normal F-region ionization. Storm commencements are practically simultaneous in occurrence over the Earth. Great turbulence and subnormal ionization prevail. Often the ion density of the daytime F2-layer becomes less than that of the F1-layer, resulting in a temporary disappearance. Subnormal values of ionization often persist for a day or more after severe disturbances. Ionospheric disturbances during a magnetic storm are illustrated in Figure 22.

The application of a new ionospheric recording technique has led to the discovery of rapidly moving clouds and other sudden changes in structure of the ionosphere during magnetic storms. A "panoramic" recorder makes complete records several times a minute on motion picture film. Subsequent projection of the record as a motion picture provides a condensation of time-scale and a continuity of events which establish a basis for understanding of many fundamental processes of the ionosphere. It is now apparent that corpuscular radiation

contributes materially to F-region ionization under favorable conditions. The principal effects of influx of the rapidly moving clouds are sudden changes in F-region ionization, rapid changes indicating turbulence which is often progressive from high to low heights, rapid fluctuations of echoes at the lower frequencies with occasional temporary disappearance indicating high absorption. Rapid changes in conditions in the ionosphere during a magnetic storm are shown in Figure 23.

The radio fade-out is the one outstanding example of a direct relationship between Sun and Earth. The simultaneous occurrence of a solar flare or chromospheric eruption and of the disappearance of radio signals from the ionosphere was established by Dellinger's analyses. The first simultaneous observation of a fade-out, solar flare, and the characteristic geomagnetic pulse was obtained at Huancayo on April 8, 1936, when a manually operated ionospheric recorder was still in use. It has been shown that the unique geomagnetic pulse associated with the fade-out is an augmentation of the normal diurnal variation at all places where it is observed. The magnetic pulse and ionospheric fade-out at the time of a solar eruption are shown in Figure 24.

Further study of this interesting effect reveals that fade-outs occur in varying degrees of intensity depending upon the nature of the solar flare. The duration of a fade-out may be as short as a few minutes or as long as several hours. In Figure 25, a fade-out of about 30 minutes' duration is shown. It is generally agreed that the phenomenon may be explained as follows: (1) The solar flare emits ultraviolet radiation of great intensity. (2) The solar radiation produces a temporary but intense ionization in the ionosphere below the normal E-layer. (3) The presence of intense ionization results in the absorption of radio signals, and the increased conductivity permits a greater circulation of current which augments the Earth's magnetic field. The presence of ionization in the lower ionosphere causes high absorption since electrons set in motion by the electric field of the radio wave strike gas particles before their energy can be reradiated. Ionization at even slightly higher levels is effective in supporting propagation of radio waves with little absorption since electrons are free to move without a large number of collisions and can therefore reradiate energy.

Ionospheric measurements during solar eclipses have established beyond doubt the fundamental nature of the several ionized regions. The E- and F1-regions are especially sensitive indicators because of the high recombination coefficients which obtain at the lower heights. Successful observations have been conducted by a number of investigators during partial to complete solar eclipses. In several expeditions, the occurrence of clouds made it impossible to conduct observations except those incorporating the radio technique. The results of eclipse measurements may be summarized as follows:

E-region.--A decrease of ionization is observed with the beginning of the eclipse. Minimum ionization is observed at the time of maximum eclipse and the normal values are again established at the end of eclipse.

F1-region.--Variations in ionization are in phase with the development of eclipse as remarked above for the E-region.

F2-region.--There is a much smaller but definite reduction in ionization associated with the eclipse. In some cases the ionization is subnormal somewhat before the beginning of visual eclipse and remains low for a short period after the eclipse.

In making eclipse observations of the ionosphere, it is customary to run a series of control observations for a period of at least a week before and after. The eclipse measurements are then compared with average or median values for control days to determine the extent of deviations from normal, as in Figures 26 and 27. This procedure is adequate for the E- and F1-regions, but has been more difficult to apply to the F2-region which is subject to much larger day-to-day fluctuations. Some of this uncertainty is ruled out by the fact that eclipse observations made at a number of different locations invariably show reduced F2-region ionization during the eclipse period.

It may be anticipated that the application of the panoramic or fast-sweep recording technique will reveal new facts regarding the fundamental processes which occur in the ionosphere during an eclipse.

Sporadic E-region ionization continues to be a subject of unusual interest. It produces a blanketing type of echo from the ionosphere which is often sufficiently dense to mask out the higher regions. It normally occurs at heights which are slightly above the normal E-layer, and it may last from a few minutes to a few hours. In general, it is much more prevalent in the higher latitudes than in equatorial regions. At Huancayo, on the geomagnetic equator, this effect is rarely observed. At other locations approaching the northern or southern auroral zones, Es occurs much more frequently. In Figure 28 the development of Es is recorded.

The diurnal distribution of Es at the auroral zone shows much greater occurrence at night than in the daytime. However, stations at somewhat lower latitudes show more sporadic E in the daytime than at night. This apparent anomaly may be reconciled, however, if one assumes that the ionizing agency is more penetrating in the daytime along the auroral zone, resulting in the high absorption which is characteristic of daytime observations in the polar regions. The same radiations at somewhat lower latitudes may be somewhat less penetrating and produce sporadic-E ionization.

A pronounced characteristic of sporadic E is its maximum occurrence during local summer with minimum in winter. The seasonal features of sporadic E already well established for the Northern Hemisphere have been confirmed for the Southern Hemisphere as a result of analyses of Watheroo data. Average diurnal curves at Watheroo also show most frequent occurrence at night with maximum at midnight, local time, although there is a tendency for the most intense sporadic E to occur during day hours. Annual trends show increasing values from 1938 to 1941 with decreasing values from 1941 through 1944, as in Figure 29. Detailed knowledge of characteristics of sporadic E are of especial interest since radio-wave propagation on frequencies up to 80 mc/sec or more may be appreciably affected by this phenomena. No pronounced recurrence tendency of sporadic E with the 27-day solar rotational period has been identified. Furthermore, comparisons of sporadic E and magnetic activity do not reveal any tendency of sporadic E to be more prevalent during periods of magnetic disturbance.

Another interesting fact regarding Es is established by simultaneous ionospheric and auroral observations at College, Alaska [6]. The aurora directly overhead was photographed by means of an automatic camera and the

results were compared with ionospheric records. The analysis revealed a remarkable coincidence of Es with aurora overhead. When aurora was observed at or near the zenith, Es was recorded on the ionospheric equipment. However, the converse of this relationship does not hold, that is, the presence of Es does not indicate that visible aurora is seen overhead.

The preceding survey of results is submitted in order to review some of the scientific knowledge of the upper atmosphere and ionosphere which has been acquired by the application of radio frequency techniques. However, in spite of the advances which have been made, there remain many important and fundamental unsolved problems in the fields of ionospheric and upper-atmospheric research. Little is known about the lower ionosphere (below approximately 80 kilometers). The current sheet which regulates magnetic diurnal variation is presumed to flow in the lower ionosphere, but this has never been confirmed experimentally. Much basic information is lacking on the fundamental processes of ion production and layer formation in the ionosphere. What wave lengths of ultraviolet radiation can penetrate from the Sun through the atmosphere to heights of 80 or even 100 kilometers and produce ionization? Why doesn't all E-layer ionization disappear at night? Why are the normal ionospheric regions apparently unaffected by the solar flare which causes the radio fade-out? What produces and supports sporadic E-region ionization? Why is there an ionosphere at all over polar regions in winter? What are the mechanisms which relate ionospheric and magnetic storms? Why is the F2-region greatly disturbed during magnetic storms while E- and F1-regions are relatively undisturbed? What is the intensity of the Earth's magnetic field at different levels in the ionosphere during quiet and disturbed conditions? Does a ring-current exist during magnetic storms at a distance of several Earth diameters? If so, can it be detected and measured by techniques now available? What further discoveries will be uncovered by application of the new panoramic technique to the study of short-period fluctuations under many different ionospheric conditions?

These represent but a few of the problems which face the experimental and theoretical geophysicists investigating the upper atmosphere. It is reasonable to expect that--as a result of vigorous and expanded interest in this field of research throughout the world--one may look forward with confidence to fruitful discoveries and the applications of scientific knowledge to the improvement of mankind.

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FIGURES 1-29

LIST OF FIGURES

Fig. 1. The Huancayo Magnetic Observatory, Peru

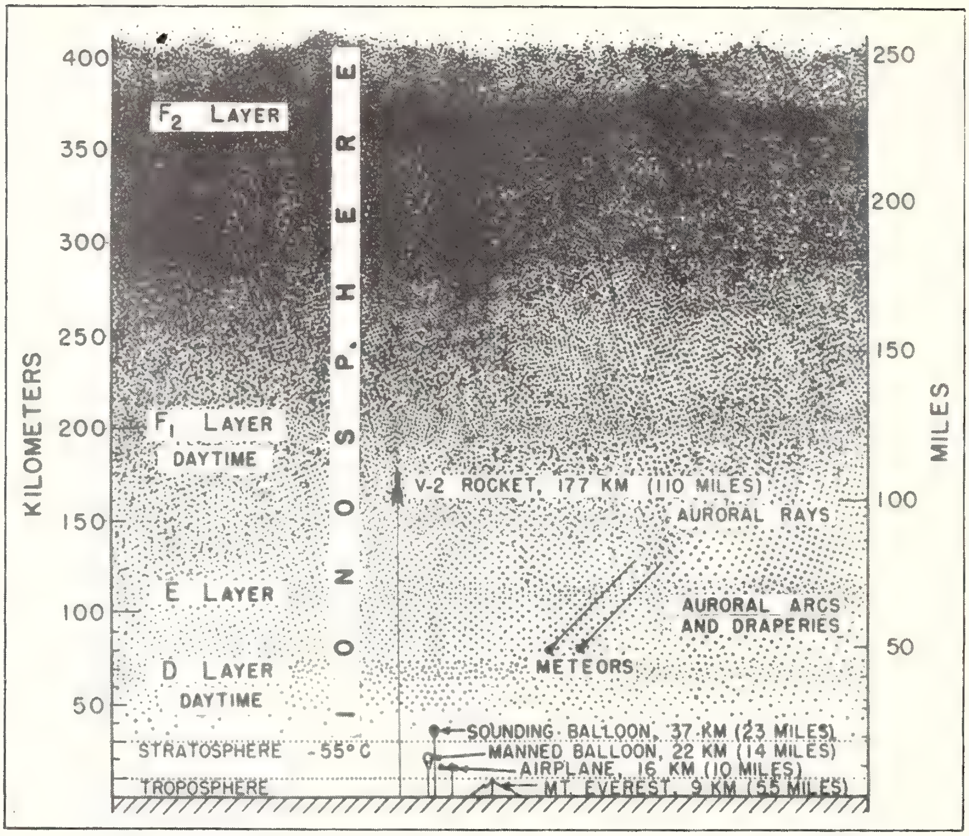

Fig. 2. The Earth's outer atmosphere. (Central Radio Propagation Laboratory)

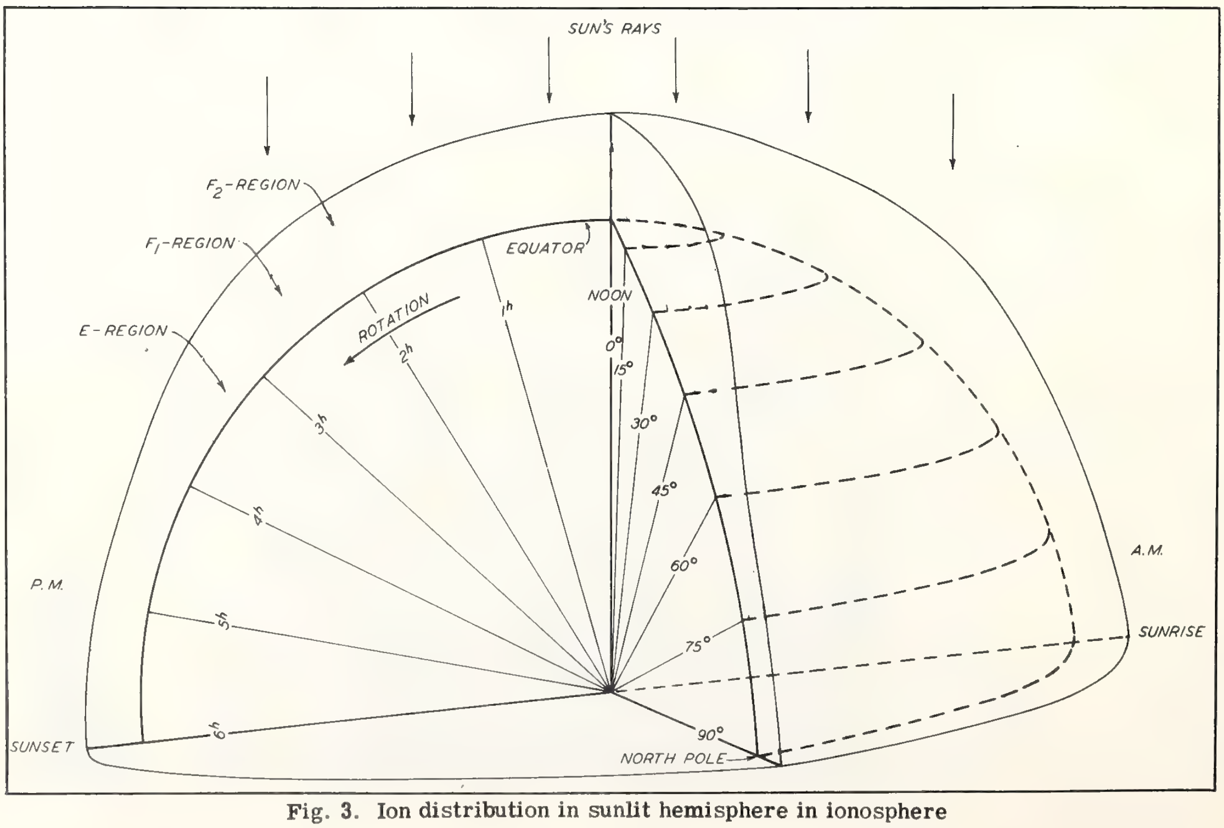

Fig. 3. Ion distribution in sunlit hemisphere in ionosphere

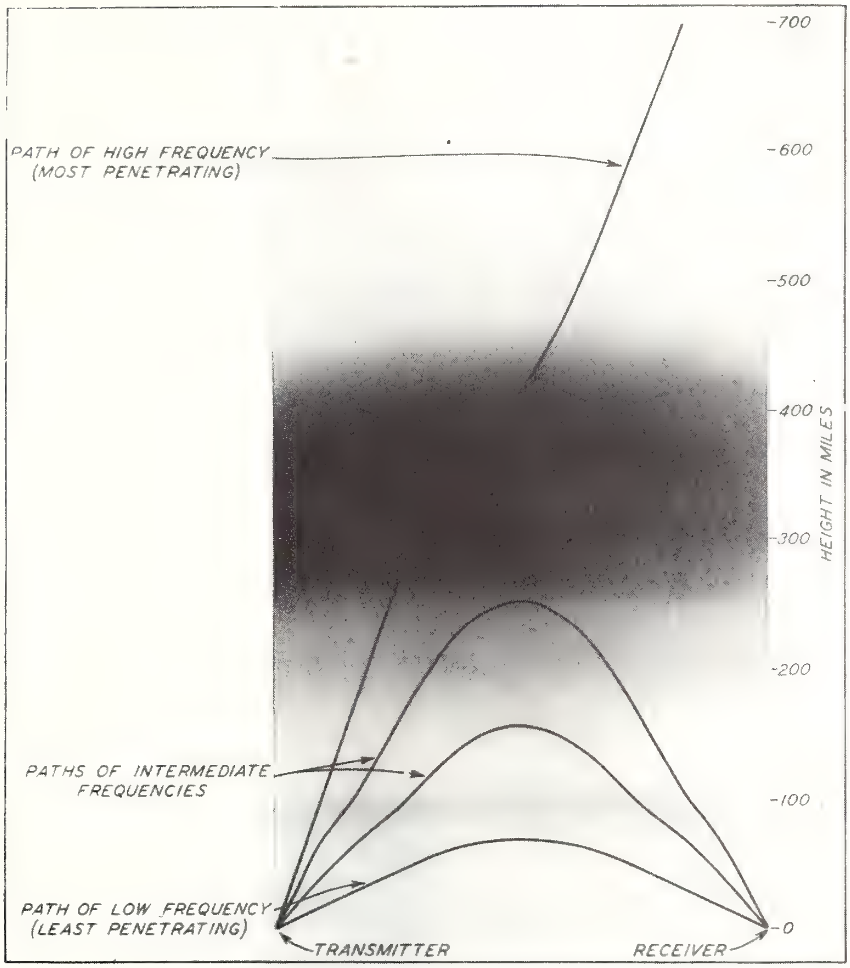

Fig. 4. Paths of radio waves of different frequencies in the ionosphere

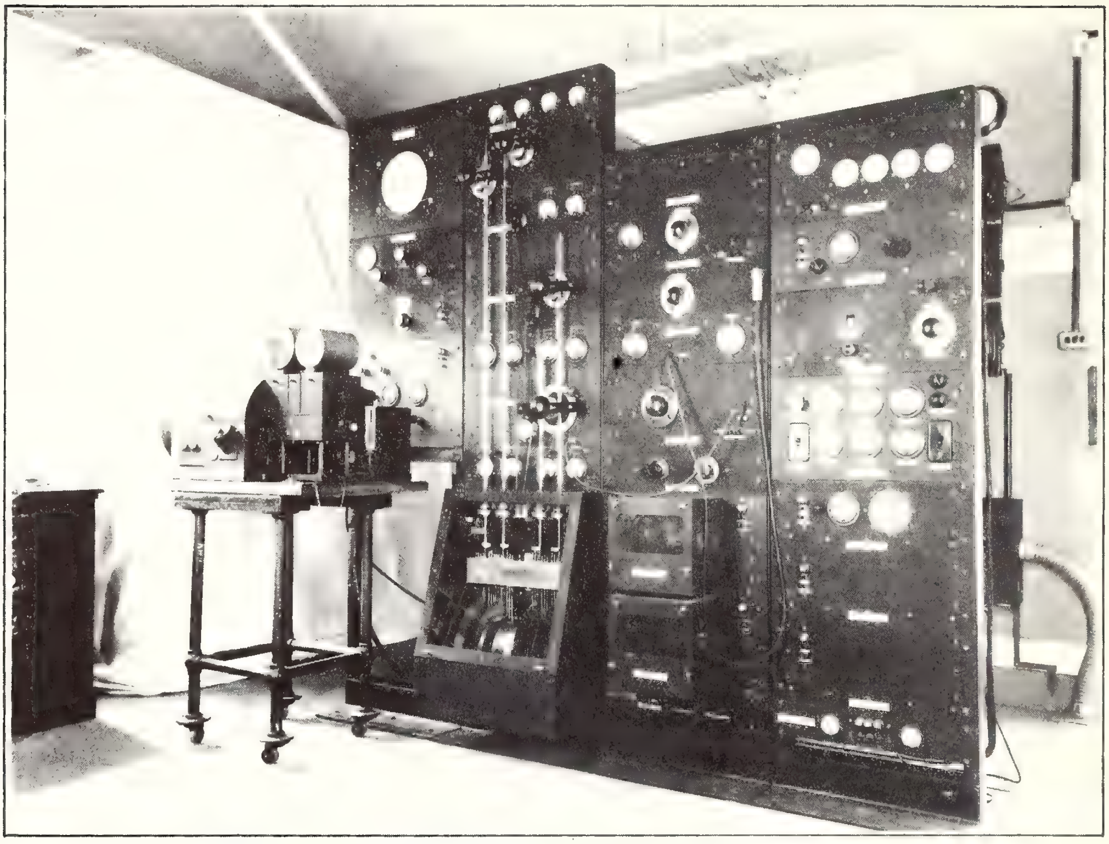

Fig. 5. Automatic multifrequency ionospheric apparatus

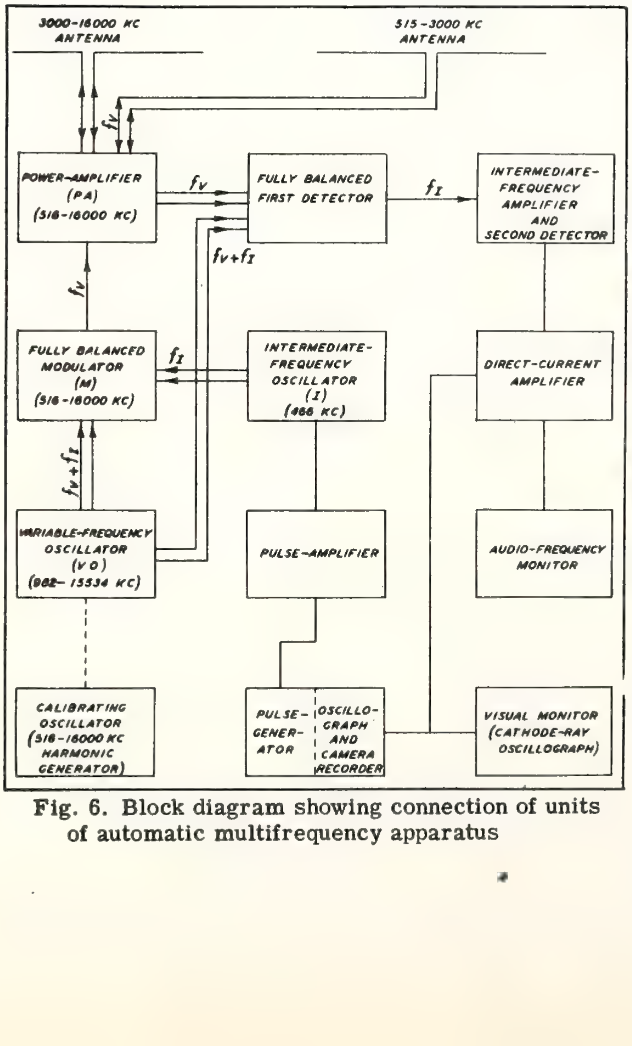

Fig. 6. Block diagram showing connection of units of automatic multifrequency apparatus

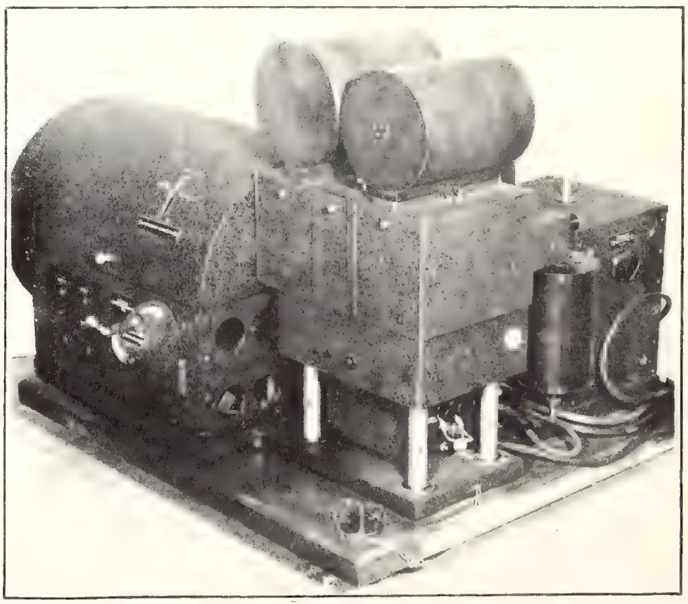

Fig. 7. Photographic recorder of automatic multifrequency apparatus

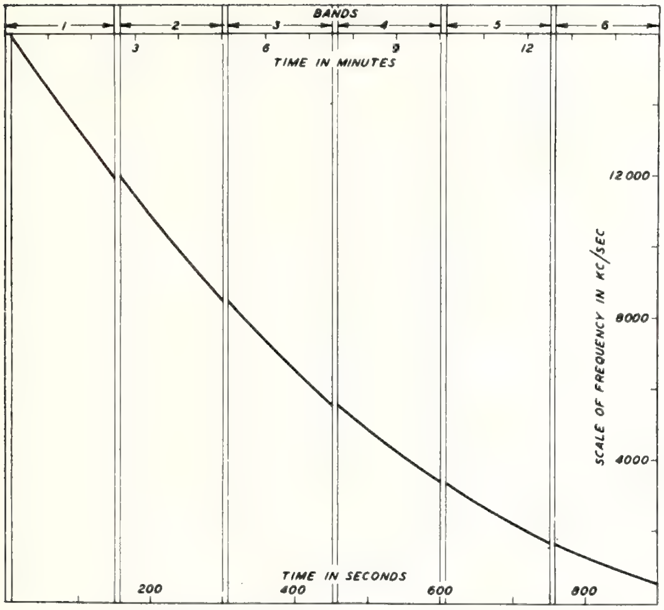

Fig. 8. Frequency versus time during one sweep of automatic multifrequency apparatus

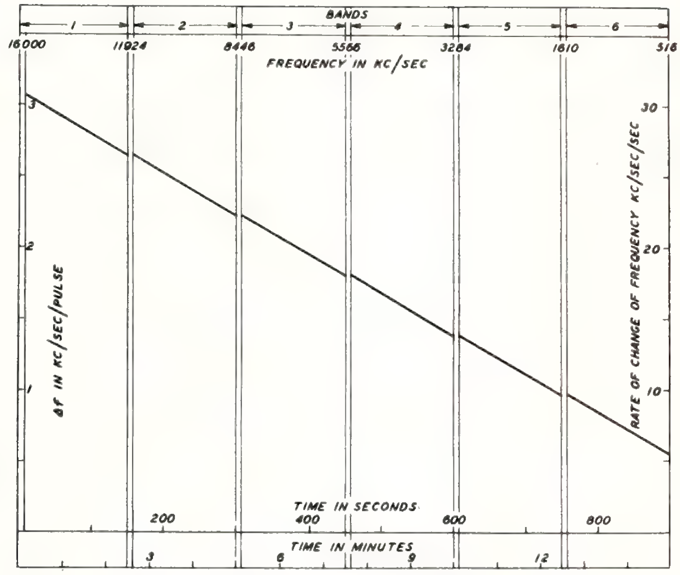

Fig. 9. Rate of change of frequency versus frequency and time and values of Δf for ten pulses per second

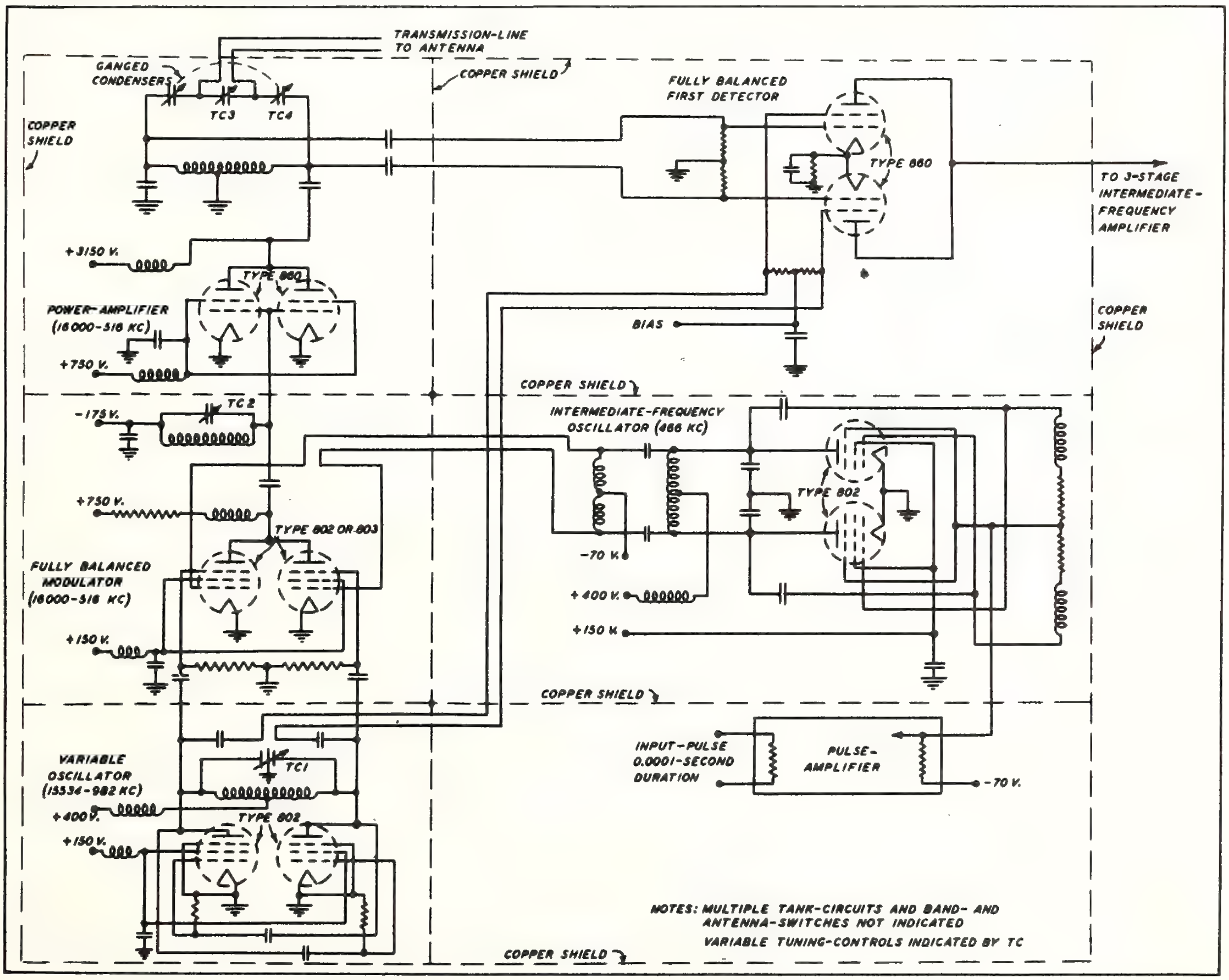

Fig. 10. Simplified schematic diagram of essential details, radiofrequency power circuits

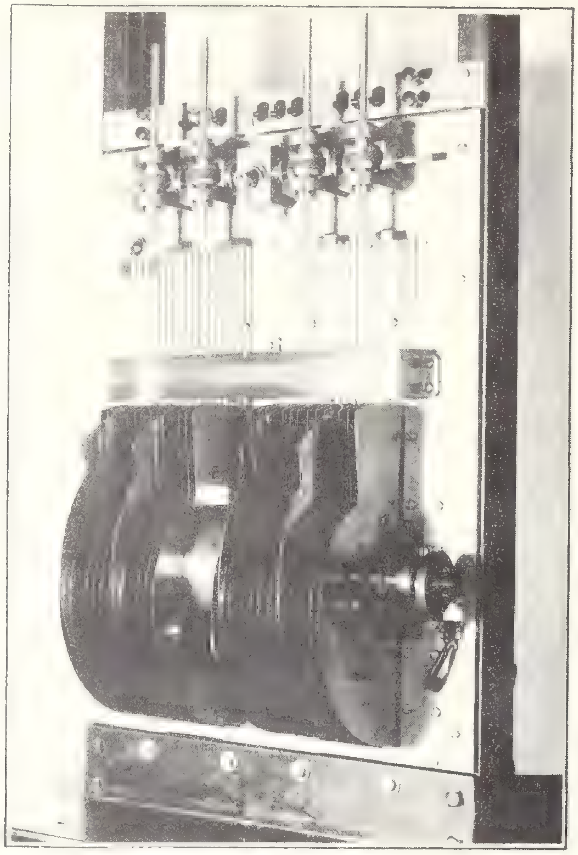

Fig. 11. Automatic tuning unit (covers removed)

Fig. 12. Details of selector arms

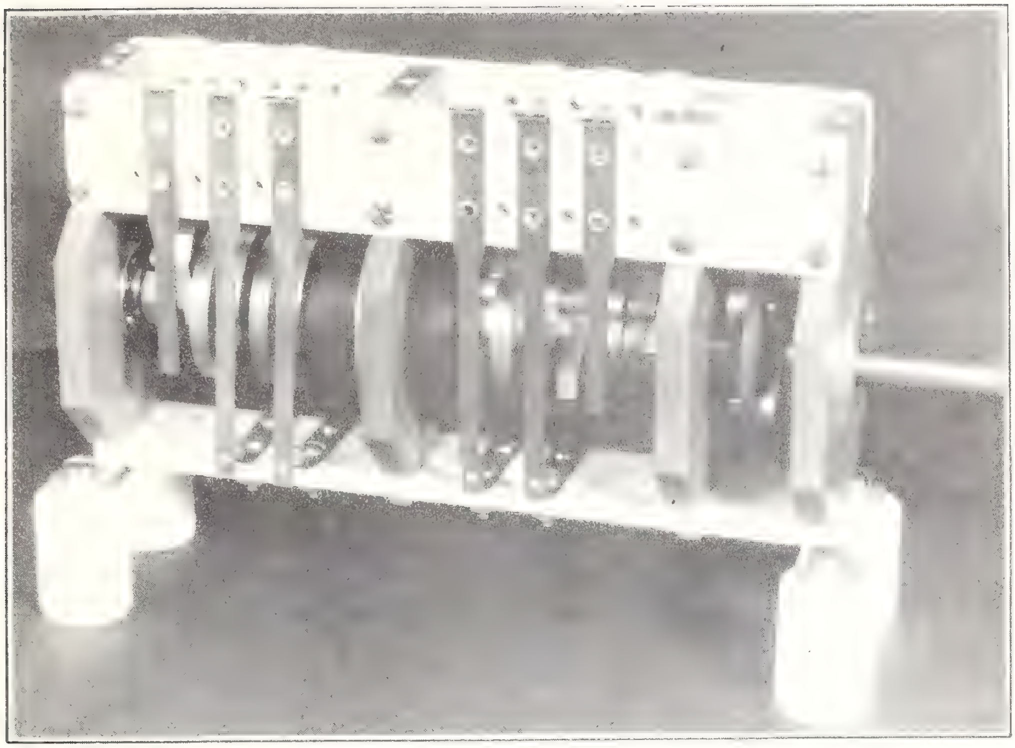

Fig. 13. Design of band switch

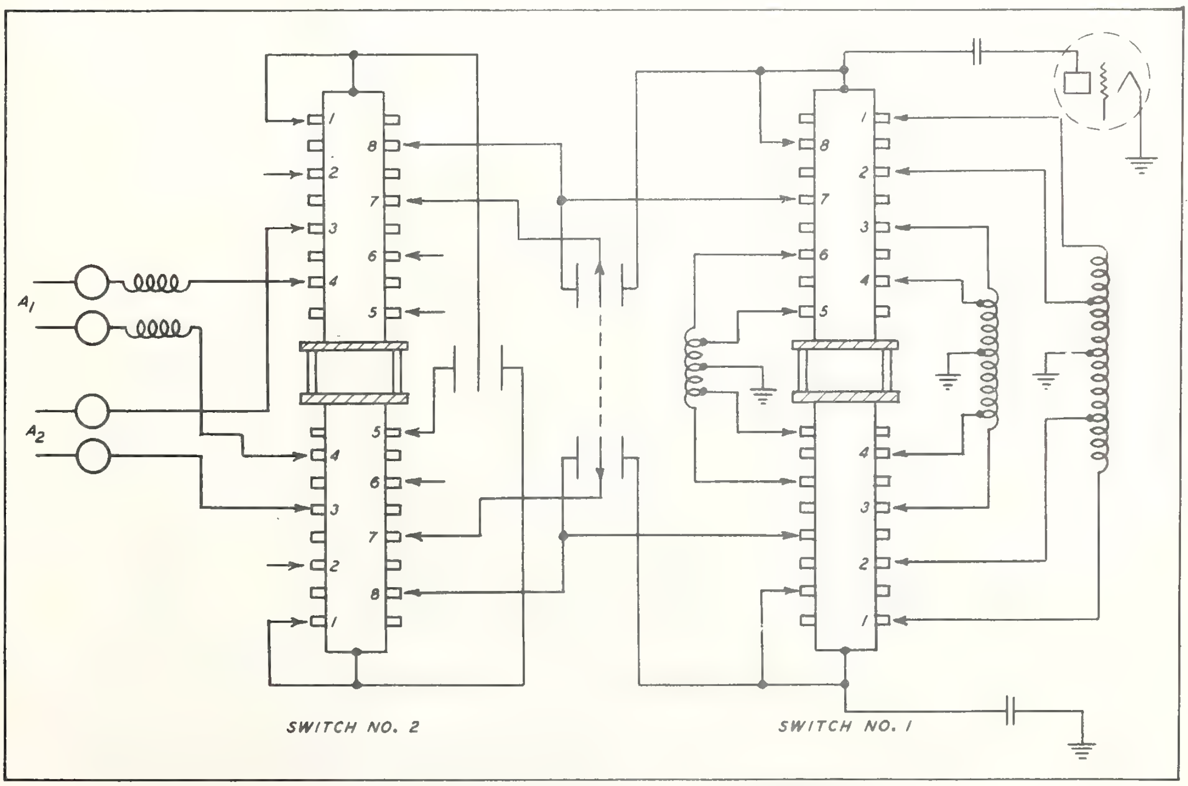

Fig. 14. Details of antenna-tuning network

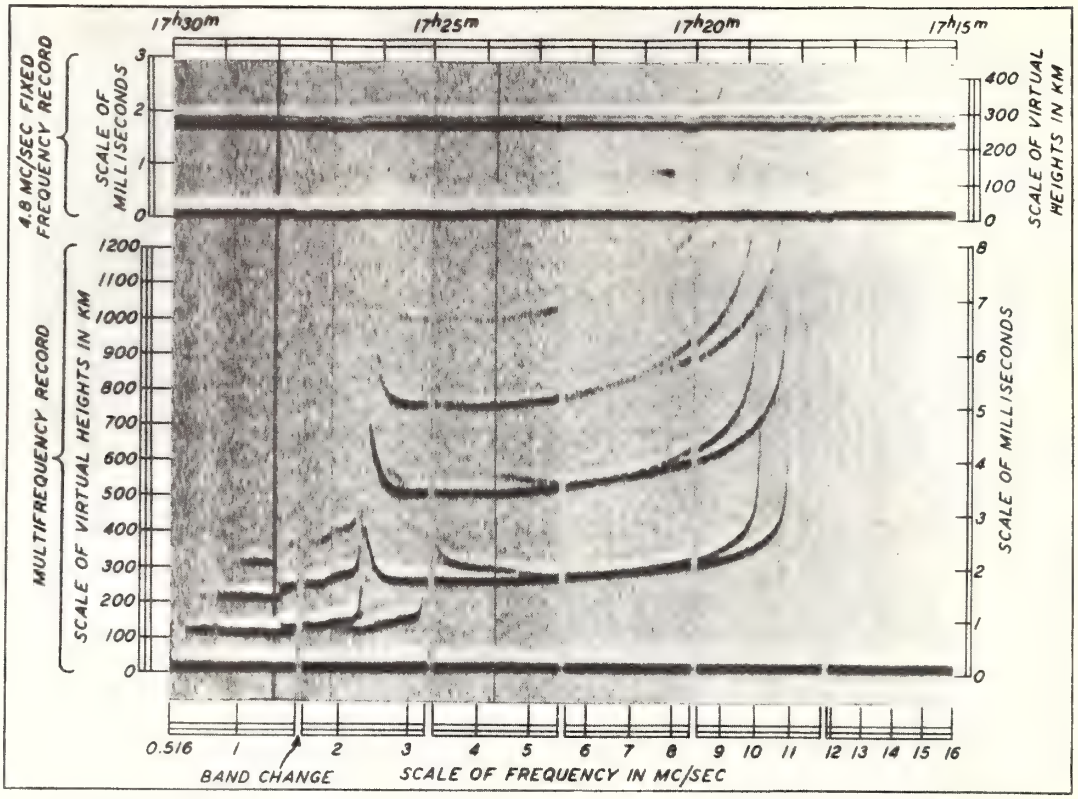

Fig. 15. Example of automatic multifrequency and fixed frequency ionospheric record

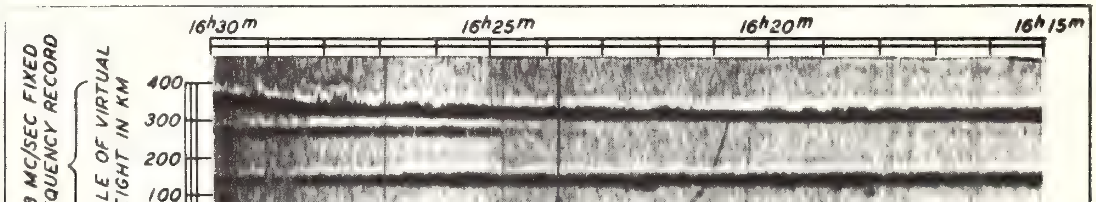

Fig. 16. Example of automatic multifrequency and fixed frequency ionospheric record

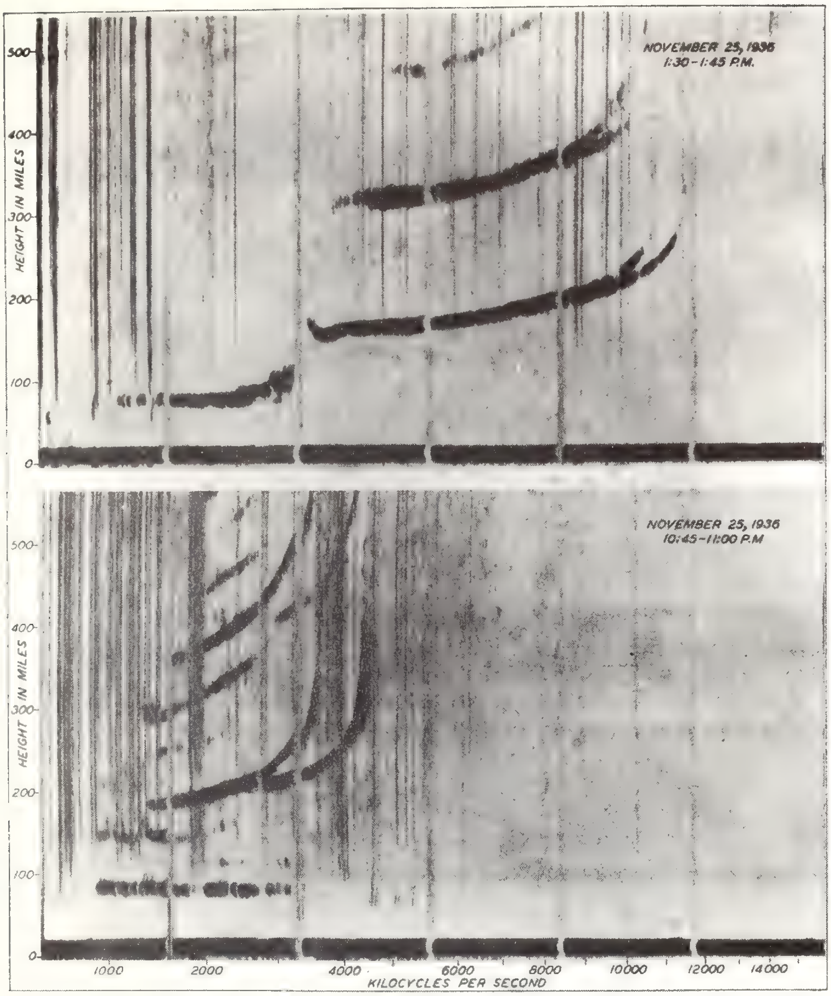

Fig. 17. Day and night conditions in the ionosphere

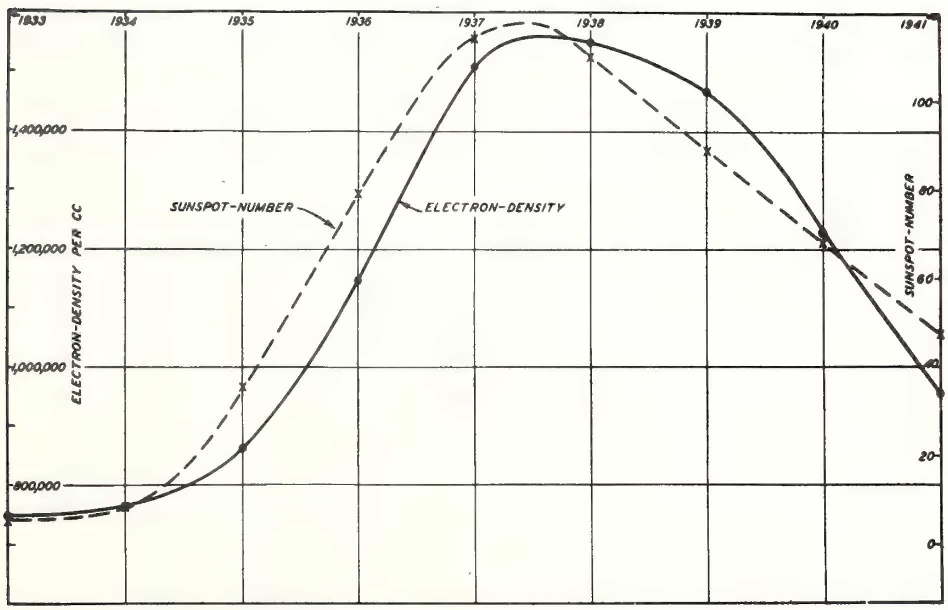

Fig. 18. Effect of sunspots on F2-region ionization. (Comparison of annual average sunspot number with annual average electron-density of F2-region, measured at noon at Huancayo Magnetic Observatory)

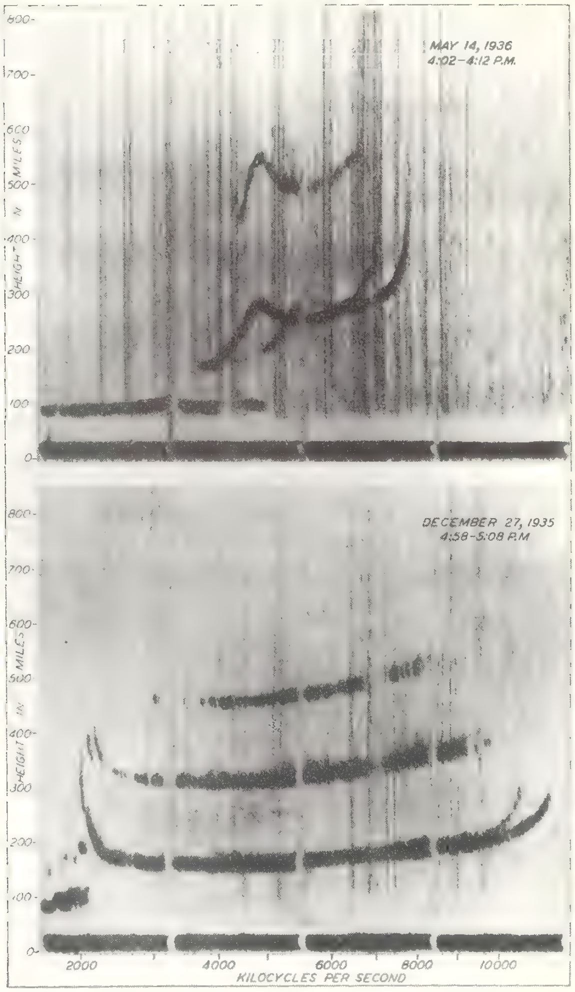

Fig. 19. Summer and winter conditions in ionosphere

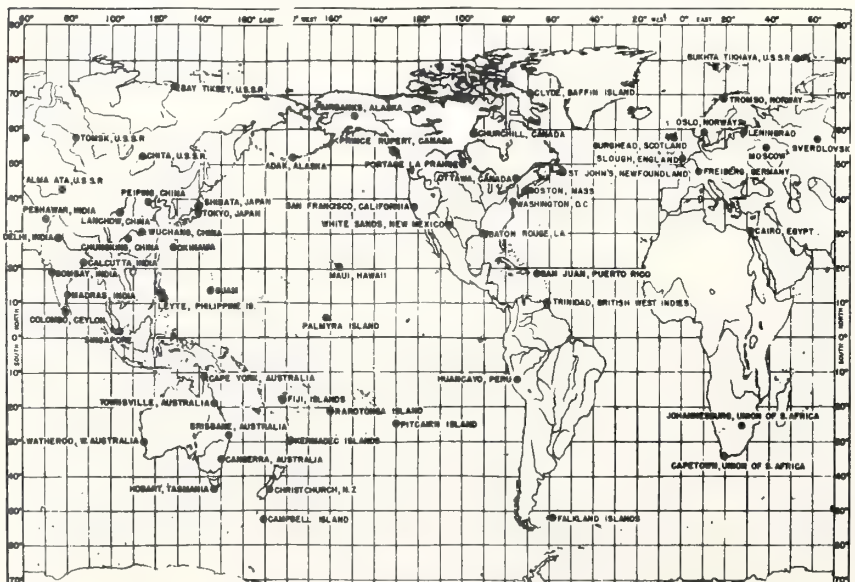

Fig. 20. World-wide distribution of ionospheric observatories, 1947

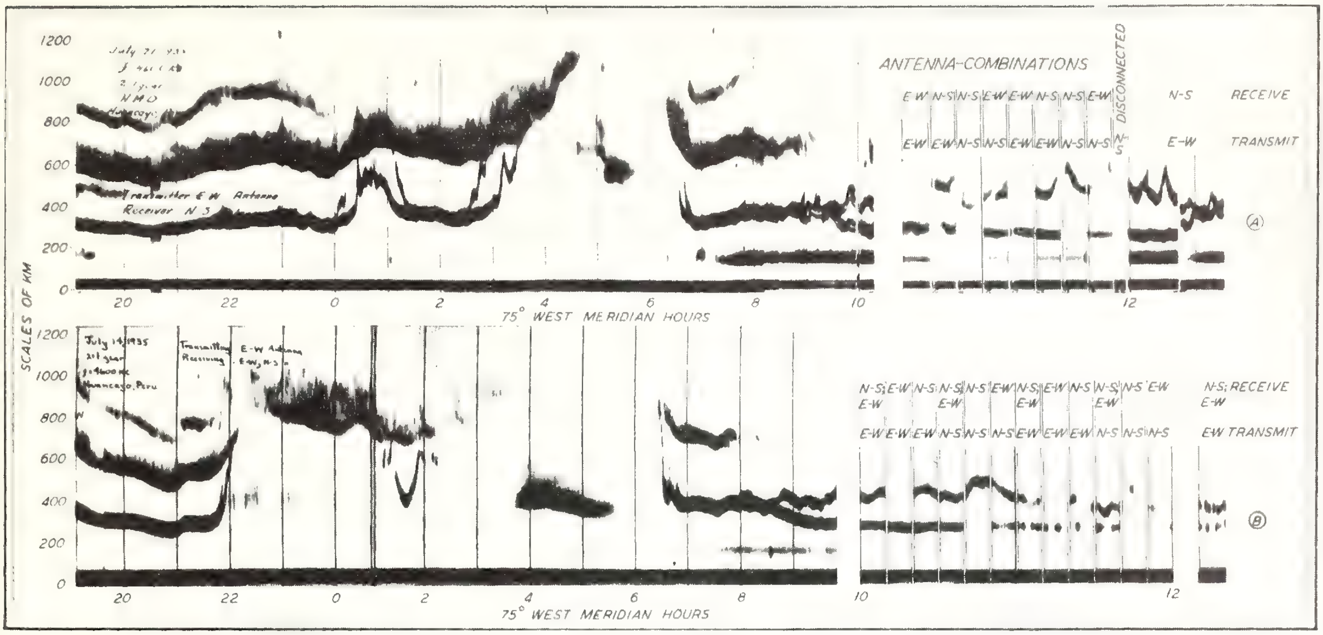

Fig. 21. Polarization experiments at Huancayo Magnetic Observatory, 1935

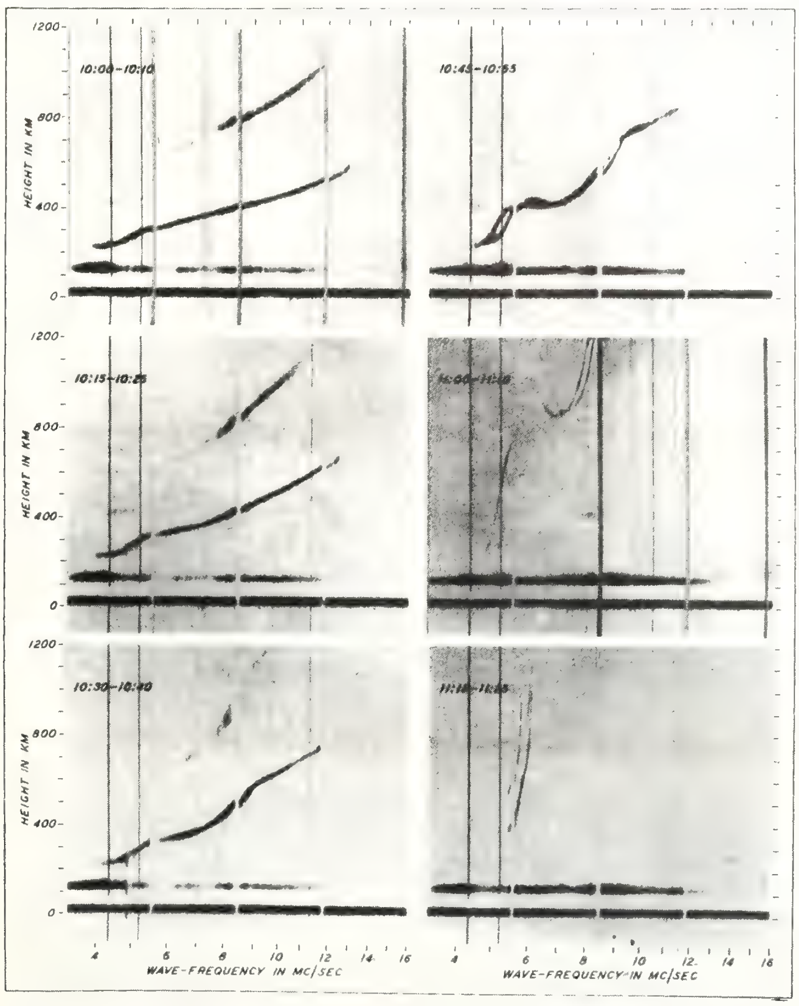

Fig. 22. Ionospheric disturbance during magnetic storm, March 24, 1940, Huancayo Magnetic Observatory

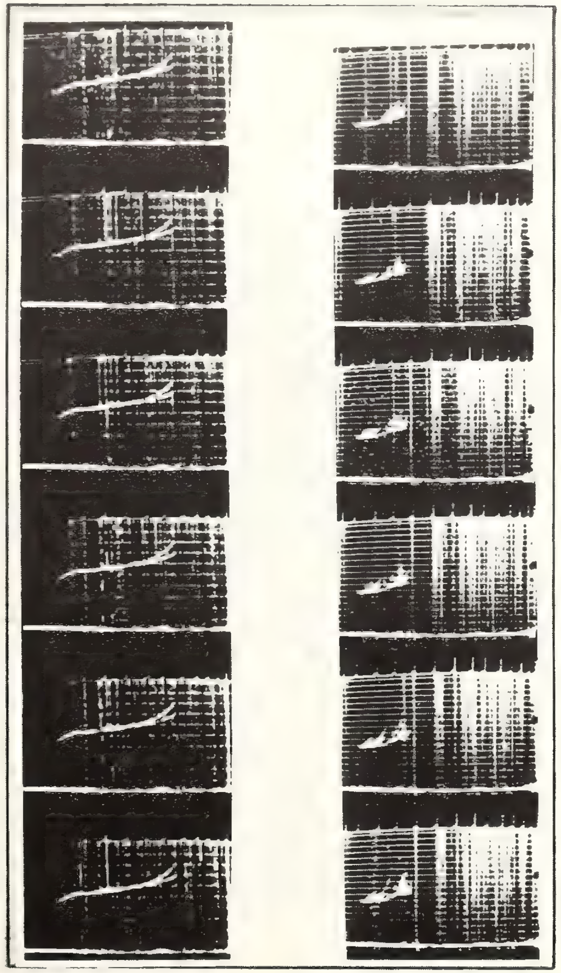

Fig. 23. Rapid ionospheric fluctuations during magnetic storm. (A) Six successive normal ionospheric 15-sec records during three minutes afternoon March 19, 1946; (B) Six successive disturbed ionospheric records during three minutes of magnetic storm, March 25, 1946, showing rapid change

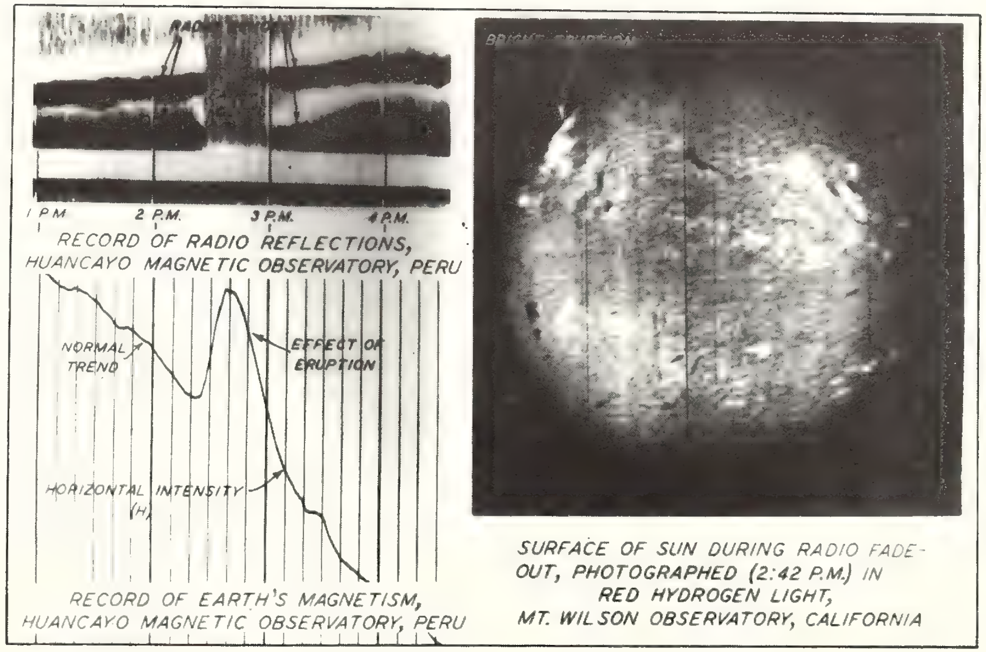

Fig. 24. Simultaneous occurrence, radio fade-out, solar flare, and magnetic pulse

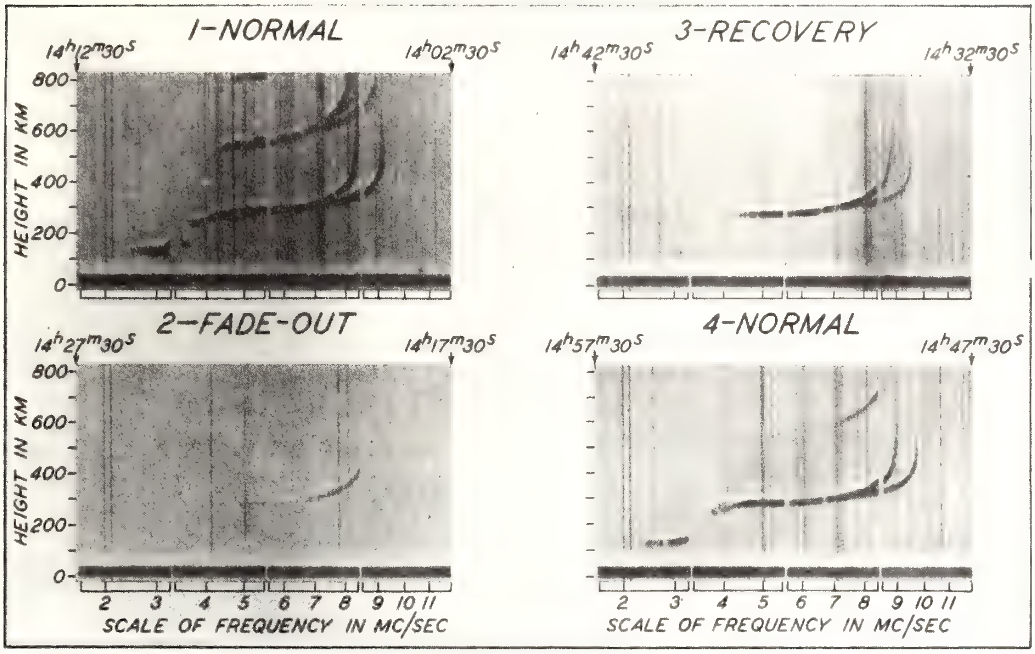

Fig. 25. Radio fade-out, illustrating characteristic sudden development and gradual recovery, Kensington Experimental Laboratory, February 26, 1941

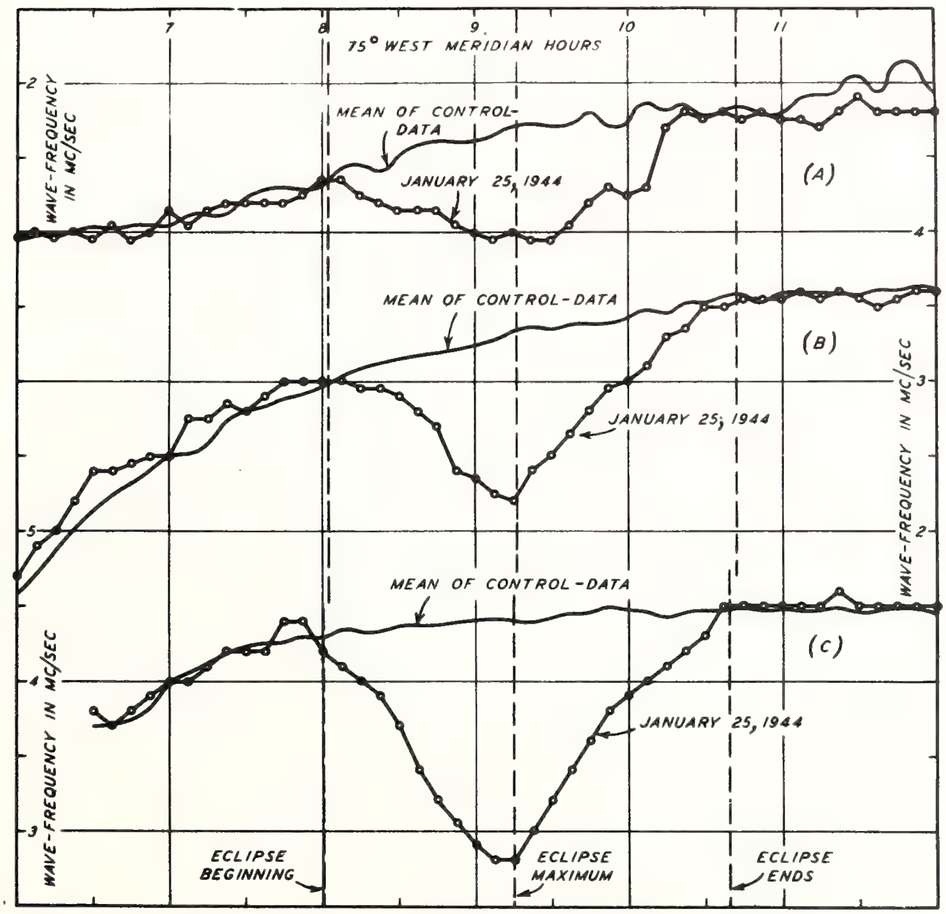

Fig. 26. Comparison of eclipse observations at Huancayo Magnetic Observatory, January 25, 1944, with mean of six control days. (A) Minimum frequency; (B) Critical frequency, E-region; (C) Critical frequency, F1-region

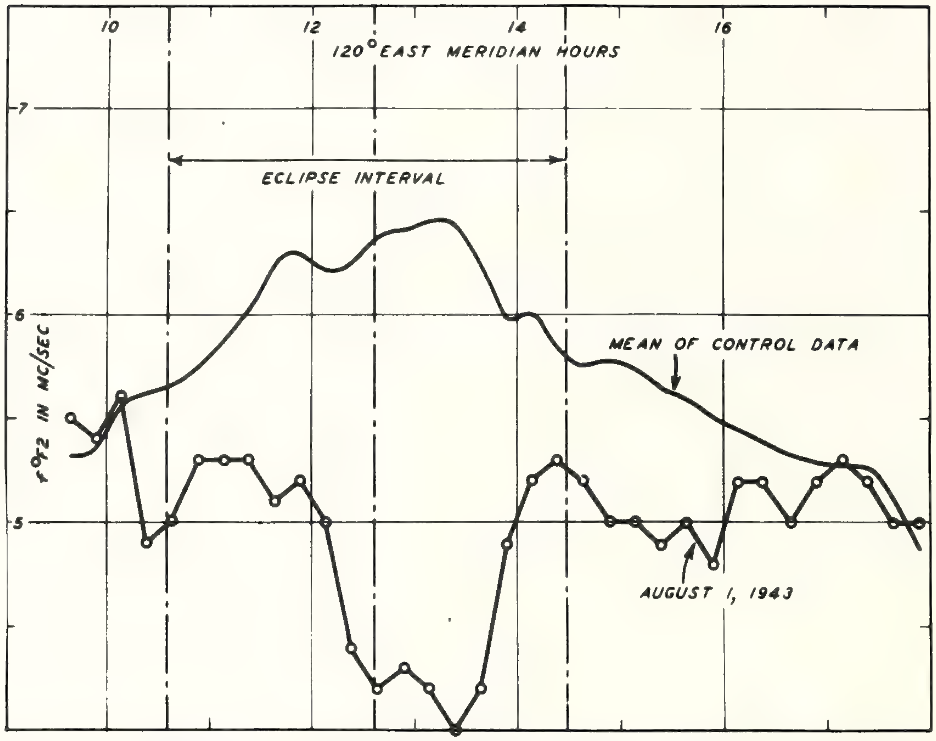

Fig. 27. Comparison of eclipse observations at Watheroo Magnetic Observatory, August 1, 1943, with control data

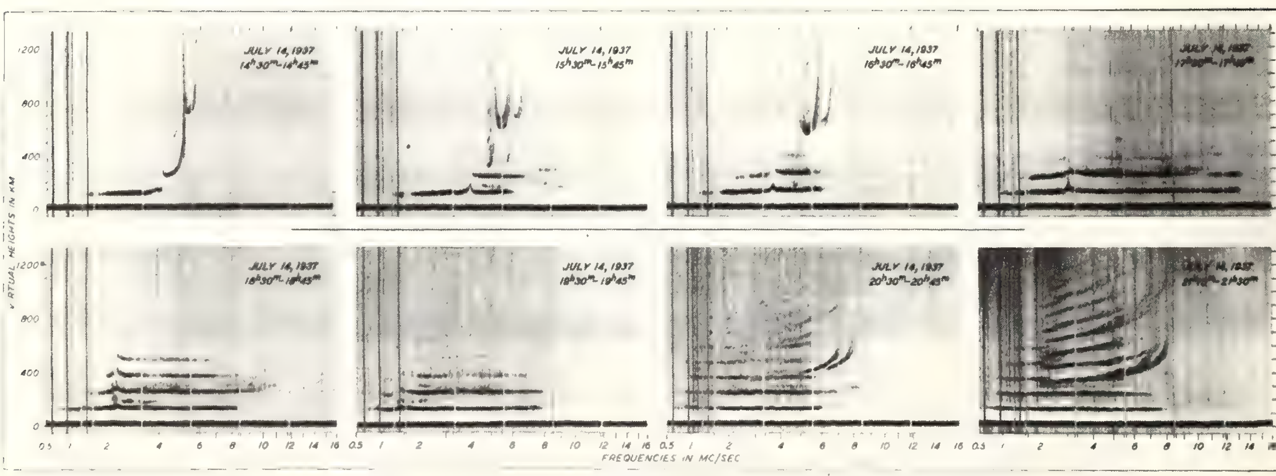

Fig. 28. Development of sporadic E ionization, Kensington Experimental Laboratory, July 14, 1937

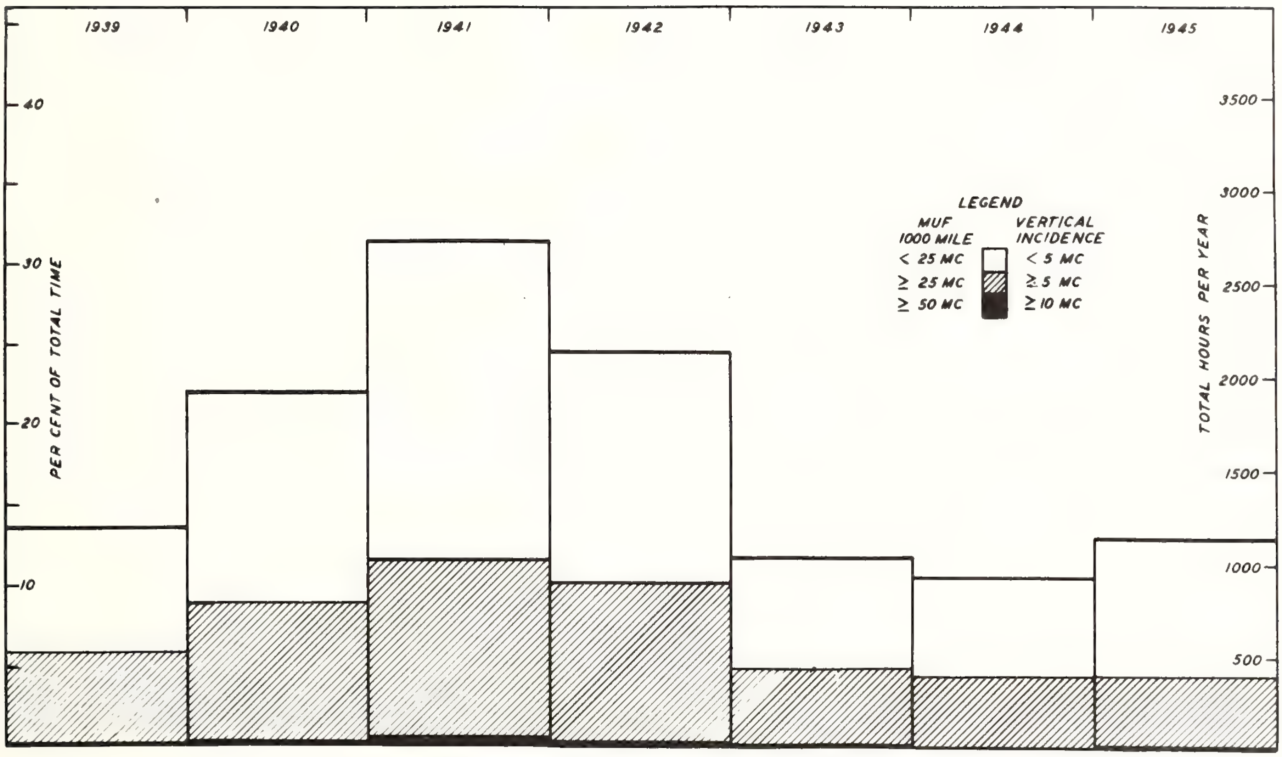

Fig. 29. Annual trend of sporadic E, Watheroo Magnetic Observatory, 1939-1945

TABLES OF RESULTS

EXPLANATORY NOTES AND COMMENTS

The ionospheric data published in this volume are:

(1) f^oF2 - Critical frequency of ordinary wave component, F2-layer.

(2) h'F2 - Minimum virtual height, F2-layer.

(3) f^oF1 - Critical frequency, F1-layer.

(4) h'F1 - Minimum virtual height, F1-layer.

(5) f^oE - Critical frequency, normal E-layer.

(6) f(min) - Lowest frequency at which reflections are recorded.

Of the above, f^oF2 and h'F2 are available and published on a full 24 hour per day basis. Night values represent f^oF and h'F after the F1- and F2-layers have merged. The other data are tabulated for daylight hours only, centered around noon. E-layer heights are not included. Scalings of this factor were discontinued in the normal observatory program after an adequate sample revealed a constancy of E-layer heights which was within the experimental error of scalings. For most purposes, it will be adequate to assume E-layer heights of 100 km.

Ionospheric Data for Period After June 30, 1946.--It is expected that the ionospheric station described in this volume will continue in operation under the Directive Committee of the Geophysical Institute of Huancayo (formerly the Huancayo Magnetic Observatory) following transfer of the observatory from the Carnegie Institution of Washington to the Government of Peru, effective July 1, 1947. Although no volumes supplementary to this one are contempleted, the basic ionospheric data for the station will be published in monthly bulletins of the Central Radio Propagation Laboratory, National Bureau of Standards of the United States Department of Commerce, which is acting as a co-ordinating organization for collection and dissemination of data from a world-wide network of stations.

TABLE 3

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1938 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JANUARY 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	9.0	8.5	7.3	6.6	5.3	5.0	7.7	9.9	11.4	12.3	12.5	11.4	11.0	11.3	11.7	11.9	12.2	12.3	11.6	10.7	9.6	9.3	8.7	10.2	9.9
2	9.0	7.8	6.7	6.2	5.7	5.2	7.9	10.0	11.2	12.3	12.6	11.9	11.8	11.8	11.2	11.3	11.4	11.6	11.5	11.9	10.1	9.1	8.3	8.1	9.8
3	7.5	7.2	6.4	4.1	3.3	3.4	6.6	8.8	10.8	11.1	10.8	9.5	9.4	10.5	11.1	11.4	11.9	12.6	12.5	11.4	9.6	8.5	8.4	8.4	9.0
4	8.0	6.4	7.8	7.0	5.7	4.7	7.3	9.9	11.4	12.2	12.7	12.3	13.4	13.9	13.2	12.6	12.6	13.7	14.0	12.7	10.8	10.4	9.9	9.6	10.5
5	7.2	5.8	5.4	4.3	3.5	2.2	6.7	9.4	11.4	12.0	10.6	9.3	9.6	10.0	10.3	11.1	11.6	11.9	11.8	10.9	9.4	12.0	10.8	9.0	9.0
6	8.0	7.5	6.6	5.1	4.3	3.4	6.9	9.9	11.4	11.9	10.9	9.3	10.3	10.5	11.0	11.9	12.0	12.2	12.0	12.0	11.8	11.7	10.5	8.7	9.6
7	6.8	4.7	4.3	4.3	7.3	3.6	5.2	8.1	10.3	11.3	10.9	10.3	10.7	11.6	11.2	11.0	11.4	12.0	12.3	11.7	10.3	11.3	11.7	10.4	9.3
8	8.9	7.8	12.0	9.0	9.2	8.8	6.6	...c	...c	11.3	10.2	10.5	10.2	11.3	11.7	12.5	13.1	13.0	12.6	11.2	9.2	8.5	8.0	8.0	...
9	7.0	7.3	7.9	9.3	8.2	...	...	...	...	...	11.5	10.6	10.6	10.6	10.1	10.8	11.5	12.0	11.8	10.4	8.5	7.8	7.3	8.3	...
10	8.3	7.0	8.0	8.3	6.0	4.8	...c	...c	...c	12.9	13.1	12.2	11.7	12.0	12.0	12.1	12.0	11.7	11.3	11.0	10.8	7.8	8.2	7.8	...
11	6.6	6.0	6.2	6.2	5.7	5.2	7.3	10.8	11.2	12.4	12.8	12.4	9.6	9.7	9.8	10.2	10.3	9.9	9.4	9.1	10.0	9.8	6.3	9.4	9.0
12	5.8	6.0	5.7	6.3	...c	...c	6.3	7.8	...c	11.4	11.8	11.0	10.9	11.5	11.8	12.0	12.3	12.2	11.8	10.7	7.7	7.5	7.8	7.1	...
13	7.1	7.2	11.8	11.4	8.3	7.1	5.6	9.3	10.2	10.0	10.3	10.6	11.2	11.8	12.2	12.7	12.0	11.7	9.8	9.3	8.0	7.2	7.0	6.3	9.5
14	5.7	...c	5.9	6.3	5.7	...c	...c	...c	...c	12.0	12.2	12.4	12.5	12.9	13.4	12.6	11.8	12.1	12.1	11.8	9.3	7.9	7.2	7.8	...
15	6.7	6.8	6.3	5.9	5.1	5.2	5.9	8.8	11.1	12.3	12.0	12.2	11.9	11.9	11.5	11.8	11.8	11.1	10.6	9.3	...c	...c	5.8	5.8	...
16	...c	...c	...c	...c	...c	5.8	7.2	9.3	10.3	10.8	11.0	10.3	10.3	11.4	11.9	12.0	12.2	12.6	12.8	12.4	11.8	11.8	12.3	12.0	....
17	10.3	9.6	8.3	7.3	5.4	4.8	6.8	8.9	9.7	10.6	10.1	9.5	10.1	11.7	12.7	12.7	12.7	13.3	13.7	13.6	13.3	12.0	11.2	9.6	10.3
18	8.8	8.0	7.0	6.0	5.5	5.1	7.0	9.8	12.0	10.3	...c	...c	10.0	10.4	10.7	11.8	12.6	13.1	13.5	13.9	13.6	13.0	13.0	11.8	...
19	9.2	7.9	7.2	5.3	3.9	2.4	7.2	10.4	12.8	13.0	9.6	9.1	9.2	9.7	11.1	12.3	12.7	13.0	13.3	13.2	12.4	12.3	11.9	10.9	10.0
20	9.9	8.5	8.1	7.8	7.0	6.3	8.2	11.3	...	11.8	10.1	10.1	9.9	...b	...b	...b	12.7	13.0	13.3	12.9	12.0	11.7	11.5	10.6	...
21	9.1	9.1	8.8	7.2	3.7	2.2	7.0	9.3	10.7	12.1	...	...	11.7	10.7	10.6	11.3	11.3	11.9	11.7	11.0	11.1	12.8	11.4	9.8	...
22	9.3	8.8	6.2	5.3	4.9	...	...c	...c	...c	10.2	10.3	10.7	11.2	11.8	12.1	11.7	11.4	10.6	10.4	11.0	10.4	10.8	10.6	11.2	...
23	11.0	11.1	10.8	9.5	7.7	5.7	7.5	11.1	13.3	13.4	13.7	13.2	10.8	10.3	10.5	10.7	11.2	11.7	11.8	10.4	8.9	8.5	8.4	8.0	10.4
24	7.6	7.0	6.7	6.0	5.3	5.6	8.2	11.2	12.4	12.8	11.9	10.5	10.1	10.5	11.0	11.8	12.6	13.0	12.8	12.9	11.5	9.9	10.0	10.2	10.1
25	10.7	9.3	8.2	7.1	6.5	6.1	7.9	10.4	12.0	13.4	13.2	13.3	12.7	11.0	7.4	8.5	9.5	9.6	10.0	10.1	10.2	10.6	9.1	6.3	9.7
26	4.8	4.8	4.7	4.8	4.6	4.7	7.1	10.0	12.2	13.7	13.4	14.0	13.7	13.2	13.2	12.3	11.8	10.5	9.7	9.4	8.0	8.8	9.1	8.6	9.5
27	8.1	8.0	8.6	8.8	6.1	4.0	6.3	9.7	11.6	13.6	13.2	13.3	13.1	13.0	13.2	12.8	12.8	12.2	11.2	9.0	7.1	6.8	7.8	8.1	9.9
28	7.7	6.2	5.8	5.7	5.5	5.0	6.7	9.3	11.1	11.8	12.3	12.4	13.0	13.1	13.5	13.2	13.2	12.6	12.3	10.7	9.0	7.0	7.5	8.3	9.7
29	8.3	8.3	8.1	9.1	10.5	7.8	9.2	11.3	12.0	12.2	12.5	12.7	13.2	13.6	13.3	13.6	13.3	13.0	12.5	11.8	8.9	8.1	10.2	10.0	11.0
30	9.2	7.3	4.9	3.6	2.8	2.4	5.7	8.8	10.9	10.8	11.1	11.0	10.7	11.2	10.8	10.7	11.0	11.4	12.1	12.0	10.4	9.6	9.9	10.0	9.9
31	9.5	8.9	7.9	8.6	7.3	6.8	8.0	10.2	11.3	12.3	13.3	11.6	11.7	12.8	13.7	13.5	12.7	12.0	13.2	11.8	11.8	13.0	12.4	10.5	11.0
MEAN*	8.2	7.5	7.3	6.7	5.9	4.9	7.0	9.8	11.4	11.9	11.7	11.3	11.2	11.5	11.6	11.8	12.0	12.0	11.9	11.3	10.2	9.8	9.4	9.1	9.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 4

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1938 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JANUARY 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	240	250	250	250	300	260	240	230	290	290	300	300	300	330	350	240	250	280	330	310	330	340	300	283
2	280	270	270	250	230	240	250	240	270	280	310	330	330	350	330	390	370	260	280	310	350	350	360	300	300
3	280	230	220	230	270	300	270	230	290	300	310	300	400	310	300	400	370	250	290	320	370	390	360	320	305
4	320	310	250	260	250	260	300	280	260	315	280	300	310	280	280	250	250	250	270	310	330	270	270	215	278
5	230	300	300	290	250	270	260	250	300	300	320	350	310	330	280	350	300	260	280	330	400	380	270	270	299
6	300	300	270	260	230	250	250	230	270	300	340	300	360	330	350	370	370	240	280	295	320	340	300	280	297
7	230	250	280	320	330	350	270	240	240	300	300	310	350	370	310	330	240	260	280	330	310	280	270	270	292
8	290	370	470	400	380	340	270	...c	...c	300	320	340	310	300	300	290	300	250	280	320	290	320	300	270	...
9	260	270	300	330	330	330	270	250	...	...	300	300	350	310	290	280	270	250	250	320	370	300	260	300	...
10	300	290	280	230	230	250	...c	...c	...c	300	300	295	300	300	300	340	270	250	280	300	330	350	270	280	...
11	250	240	240	240	240	220	250	230	290	300	300	320	320	300	360	420	410	260	280	330	310	300	430	360	300
12	240	240	240	...c	...c	...c	280	260	250	...c	320	330	320	350	310	300	270	250	290	330	380	350	280	240	...
13	240	320	370	400	360	280	280	260	320	320	...b	300	300	300	330	350	240	270	280	330	430	390	320	280	...
14	230	230	230	220	240	...c	...c	...c	...c	270	300	300	300	400	400	310	270	270	280	300	420	440	400	380	...
15	300	250	230	230	310	320	230	250	290	280	320	390	380	320	...b	350	360	370	280	330	...c	...c	400	350	...
16	...c	...c	...c	...c	...c	220	250	...c	280	280	300	300	280	...b	300	...b	240	270	280	300	320	320	310	280	...
17	260	280	370	240	230	300	290	270	230	290	260	270	280	q460b	q450b	280b	280b	270	270	300	300	300	320	360	298
18	360	320	270	270	260	250	270	250	270	...c	...c	...c	280	270	280	270	260	250	270	270	300	300	260	240	...
19	240	230	230	220	230	250	270	240	270	300	290	290	290	290	300	300	250	270	290	310	320	320	300	280	274
20	270	250	300	300	300	270	270	250	...	285	280	290	300	...b	...b	...b	q400b	290b	300	330	370	310	230	330	...
21	340	300	280	220	230	250	260	250	250	280	...	...	300	280	300	300	290	250	290	310	310	310	300	280	...
22	240	220	210	350	240	...	...c	...c	...c	280	300	280	290	290	290	300	240	250	270	290	310	300	300	270	...
23	240	240	230	220	210	220	270	240	260	270	270	280	280	290	290	300	230	250	290	340	390	350	270	260	270
24	240	230	230	240	250	270	280	270	250	290	280	280	290	280	280	300	300	270	280	310	340	360	300	240	278
25	220	220	240	240	230	230	270	230	280	290	300	300	300	330	300	260	250	280	300	270	250	220	210	240	261
26	290	310	300	250	220	280	280	240	270	270	270	290	280	300	300	280	260	260	280	320	290	220	240	270	274
27	270	200	240	220	230	250	270	240	270	290	290	300	320	300	280	300	240	260	280	250	400	360	300	250	275
28	220	230	220	230	230	250	270	240	250	280	300	290	310	300	280	310	270	250	270	320	390	410	330	280	280
29	240	230	250	280	260	250	260	240	270	270	270	280	270	300	300	270	260	240	280	320	330	370	360	280	278
30	270	210	240	210	230	230	270	230	270	280	300	290	300	300	300	310	260	250	270	300	300	300	300	290	271
31	280	230	260	220	210	250	290	230	280	290	290	300	300	300	300	300	290	250	230	300	300	240	240	240	269
* MEAN	265	260	269	263	257	267	270	245	268	289	297	304	310	310	306	316	282	261	280	310	338	326	303	284	287

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 5

JANUARY 1938 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — JANUARY 1938

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	5.3	5.4	5.4	5.6	5.5	5.5	5.4	...	...	...
2	...	...	5.0	5.2	5.4	5.6	5.5	5.5	5.4	5.6	5.4	...	...
3	...	...	5.2	5.5	5.3	5.4	5.3	5.2	5.2	6.0	5.5	...	...
4	...	...	...	5.3	5.3	5.4	5.3	4.8	4.7	...	...	...	...
5	...	...	5.0	5.2	5.5	5.3	5.3	5.2	4.8	5.5	5.0	...	...
6	...	...	4.7	5.3	5.2	5.0	5.3	5.2	5.5	5.5	5.5	...	...
7	...	...	...	5.2	5.1	5.1	5.3	5.6	5.2	5.3	...	...	...
8	...	...	...	5.1	5.5	5.3	5.3	5.3	5.1	4.8	4.9	...	...
9	...	...	...	...	5.3	5.4	5.8	5.3	5.2	4.7	4.5	...	...
10	...	...	...	5.5	5.5	5.2	5.5	5.3	5.4	5.5	4.5	...	...
11	...	...	5.3	5.3	5.3	5.5	5.4	5.3	5.5	6.0	6.1	...	...
12	...	...	...	...	5.5	5.5	5.5	5.5	5.1	5.1	4.4	...	...
13	...	...	5.5	...b	...b	5.5	5.4	5.5	5.6	5.5	...	...	...
14	...	...	...	5.2	5.5	5.5	...b	6.4	6.4	5.3	4.5	...	...
15	...	...	5.1	5.1	5.7	6.2	6.0	5.4	...b	5.5	5.4	...	...
16	...	...	5.2	5.3	5.5	5.5	5.3	...b	5.3	...b	...	...	...
17	...	...	...	5.2	5.3	5.3	5.4	...b	...b	...b	...b	...	...
18	...	...	4.5	...c	...c	...c	5.3	5.3	5.3	5.0	4.4	...	...
19	...	...	5.0	5.4	5.4	5.3	5.3	5.3	5.4	5.3	...	...	...
20	...	...	...	5.3	5.5	5.3	5.3	...b	...b	...b	...b	...b	...
21	...	...	...	5.3	...	...	5.4	5.6	5.5	5.4	4.8	...	...
22	...	...	...	5.2	5.4	5.4	5.5	5.4	5.5	5.5	...	...	...
23	...	...	5.0	5.3	5.4	5.4	5.5	5.5	5.4	5.4	...	...	...
24	...	...	...	5.4	5.4	5.4	5.4	5.4	5.3	5.4	5.0	...	...
25	...	...	5.3	5.4	5.7	5.6	5.4	5.3	5.0	4.8	...	...	...
26	...	...	5.2	5.3	5.3	5.4	5.5	5.5	5.4	5.2	...	...	...
27	...	...	5.0	5.4	5.5	5.5	5.4	5.3	5.3	5.4	...	...	...
28	...	...	4.7	5.2	5.7	5.5	5.9	5.5	5.2	5.6	4.8	...	...
29	...	...	5.1	5.3	5.2	5.5	5.3	5.5	5.3	4.8	4.2	...	...
30	...	...	5.0	5.3	5.5	5.4	5.5	5.5	5.4	5.3	4.4	...	...
31	...	...	5.0	5.2	5.3	5.5	5.5	5.4	5.3	5.0	4.7	...	...
* MEAN	...	...	5.0	5.3	5.4	5.4	5.4	5.4	5.3	5.3	4.9	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	210	220	210	200	200	200	210	...	...	...
2	...	...	220	220	210	210	200	200	200	200	240	...	...
3	...	...	220	210	210	210	230	205	205	200	220	...	...
4	...	...	...	220	200	200	200	200	200	...	...	...	...
5	...	...	240	210	210	200	200	210	210	200	220	...	...
6	...	...	220	210	205	200	200	200	200	200	230	...	...
7	...	...	...	220	210	210	200	200	200	200	...	...	...
8	...	...	...	210	200	210	210	200	200	200	220	...	...
9	...	...	...	...	200	200	200	200	200	200	220	...	...
10	...	...	...	220	210	210	210	...b	210	215	210	...	...
11	...	...	220	220	210	200	...b	205	200	210	220	...	...
12	...	...	...	...	230	230	...b	220	210	210	230	...	...
13	...	...	240	...b	...b	240	230	230	210	210	...	...	...
14	...	...	...	230	250	...b	...b	...b	240	220	200	...	...
15	...	...	230	220	210	220	210	220	...b	230	240	...	...
16	...	...	240	230	240	...	...b	...b	240	...b	...	...	...
17	...	...	...	230	240	260	260	...b	...b	...b	...b	...	...
18	...	...	240	...c	...c	...c	200	200	200	200	230	...	...
19	...	...	240	230	215	210	210	205	220	220	...	...	...
20	...	...	...	230	210	210	215	...b	...b	...b	...b	...b	...
21	...	...	...	240	...	...	210	210	210	230	230	...	...
22	...	...	...	230	220	220	230	220	230	230	...	...	...
23	...	...	230	230	220	210	220	210	220	225	...	...	...
24	...	...	...	230	210	210	210	210	200	200	230	...	...
25	...	...	220	210	220	210	210	220	210	200	...	...	...
26	...	...	220	210	210	210	210	210	210	210	...	...	...
27	...	...	230	230	220	220	230	210	200	200	...	...	...
28	...	...	230	230	210	210	210	210	200	200	200	...	...
29	...	...	240	210	210	210	210	210	200	205	210	...	...
30	...	...	220	210	210	200	200	200	200	210	200	...	...
31	...	...	225	220	200	200	210	200	200	210	210	...	...
* MEAN	...	...	229	221	215	212	212	208	208	209	220	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 6

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	1.8	1.9	2.3	2.0	2.0	1.8	1.7	1.0	0.7	2.2	3.0	3.4	3.9	4.0	4.1	4.4	4.2	4.0	3.7	3.5	2.8	1.9
2	0.8	1.2	1.8	1.9	2.0	2.0	2.1	2.0	1.8	1.7	1.2	1.0	0.8	2.1	2.9	3.5	3.7	3.8	4.0	4.2	4.1	3.9	3.5	3.4	2.7	1.8
3	0.7	0.8	1.0	1.2	1.8	1.8	1.8	1.9	1.8	1.7	1.2	1.0	0.8	2.1	3.0	3.4	3.6	4.0	4.1	4.2	4.2	3.9	3.7	3.5	2.8	2.0
4	0.8	1.2	1.7	1.8	2.6	2.7	3.0	2.8	2.0	1.8	1.8	1.0	0.8	1.8	3.3	3.4	3.8	4.1	4.2	4.2	4.1	4.0	4.3	3.8	2.6	2.0
5	0.8	0.9	1.1	1.7	1.8	1.9	1.8	1.9	1.8	1.7	1.4	0.8	0.6	2.1	2.7	3.4	3.7	3.9	4.1	4.1	4.1	4.0	3.6	3.2	2.7	1.9
6	0.6	1.4	1.7	1.8	1.9	2.1	1.9	2.1	1.8	1.9	1.2	0.8	0.6	2.2	2.7	3.4	3.6	4.0	4.1	4.1	4.1	4.0	3.7	3.2	2.8	2.0
7	0.6	0.8	1.1	1.7	1.9	1.9	2.0	1.9	2.0	1.8	1.7	1.0	0.8	1.9	2.8	3.3	3.7	4.0	4.1	4.2	4.2	3.9	3.6	3.3	2.8	1.9
8	0.6	...	...	2.1	2.1	2.2	2.3	2.1	2.0	1.8	1.8	0.8	0.8	1.8	...c	...c	3.8	4.1	4.2	4.3	4.1	3.9	3.7	3.2	2.8	1.9
9	0.8	1.0	...	...	1.8	1.8	1.9	2.0	2.0	1.8	1.7	1.2	0.7	2.2	2.8	...	...	4.0	4.1	4.2	4.2	4.0	3.8	3.4	2.8	1.9
10	...	...	...	1.2	1.9	2.3	2.0	3.5	2.2	2.0	1.8	1.2	0.8	...c	...c	...c	3.7	3.9	4.1	4.2	...b	4.1	3.8	3.4	2.9	2.1
11	0.6	0.8	1.7	1.9	1.8	2.0	5.5	1.9	1.9	1.8	1.8	1.2	0.8	2.0	2.7	3.4	3.8	4.1	4.1	...b	4.2	4.0	3.7	3.4	2.7	1.8
12	1.0	0.7	1.0	...	2.3	2.7	2.6	2.4	2.8	2.3	1.8	1.2	0.9	1.4	2.0	3.0	...c	4.3	4.5	...b	4.5	4.3	4.1	3.5	2.9	2.0
13	0.8	1.2	1.8	5.4	5.5	4.0	3.8	2.8	2.5	2.5	1.8	1.2	0.8	2.0	2.9	3.5	...b	...b	4.2	4.6	4.3	4.2	4.1	3.7	3.2	1.8
14	...	...	...	2.3	3.8	5.3	5.5	5.2	4.0	2.2	1.7	1.2	0.8	...c	...c	...c	4.0	4.6	...b	...b	...b	4.5	4.1	3.6	3.0	2.2
15	1.0	1.2	1.8	2.2	2.5	4.1	6.3	2.9	5.8	4.5	2.5	1.8	0.8	2.0	3.2	3.5	3.8	4.3	4.3	4.6	4.5	...b	...b	3.5	2.8	2.1
16	...	...	2.1	2.8	2.8	3.9	5.0	5.5	4.9	5.3	2.8	1.8	0.7	1.8	...c	3.7	4.1	4.5	5.0	...b	...b	...b	...b	3.8	3.4	2.2
17	0.6	1.0	2.8	3.0	3.7	2.8	5.0	7.6	7.4	5.0	4.0	2.0	0.8	2.0	2.8	3.2	4.2	4.7	4.9	5.0	...b	...b	...b	...b	3.1	2.3
18	0.8	1.0	1.4	...	...	...	2.2	2.1	1.9	2.0	1.7	1.1	0.8	2.0	2.8	3.4	...c	...c	...c	4.4	4.3	4.0	3.8	3.4	2.9	2.2
19	0.6	1.0	1.8	1.8	1.9	1.8	2.2	2.3	2.6	2.1	2.0	1.7	0.8	2.0	3.0	3.6	3.9	4.1	4.3	4.4	4.3	4.4	4.2	3.5	2.9	2.2
20	0.8	1.3	...	2.5	2.2	2.8	3.0	...b	...b	...b	6.7	3.8	1.3	2.0	2.8	...	4.1	4.2	4.6	4.6	...b	...b	...b	...b	...b	2.2
21	0.6	1.8	2.8	2.6	...	...	3.4	3.7	2.4	2.2	1.8	1.1	1.0	2.2	3.0	3.8	4.0	...	...	4.5	4.5	4.2	3.8	3.4	2.9	2.1
22	...c	...c	...c	2.8	2.8	2.7	2.7	3.5	2.6	2.3	1.8	1.0	0.6	...	...	...	3.8	4.2	4.3	4.3	4.4	4.2	3.9	3.5	2.9	2.2
23	0.8	1.3	2.4	2.4	2.4	2.7	2.7	3.3	3.4	2.3	2.0	1.1	0.6	2.2	3.1	3.7	3.9	4.2	4.3	4.4	4.5	4.3	4.0	3.5	3.0	2.1
24	0.9	1.9	2.3	2.8	2.7	...	3.0	2.8	2.8	2.3	1.9	1.2	0.8	1.1	3.2	3.6	4.0	4.4	4.4	4.5	4.4	4.2	3.9	3.6	3.6	2.3
25	0.7	1.2	1.8	1.9	2.8	2.2	2.7	2.9	2.6	2.1	1.9	1.2	1.1	2.0	2.9	3.4	3.8	4.2	4.2	4.3	4.5	4.1	3.8	3.4	2.8	2.0
26	0.5	1.0	1.2	1.9	2.2	2.8	2.2	2.2	2.1	2.0	3.9	2.1	0.8	1.8	2.7	3.4	3.7	3.8	4.2	4.2	4.1	4.0	3.7	...b	3.0	2.1
27	0.5	0.9	1.8	1.8	2.0	2.3	2.5	2.6	3.0	3.0	2.8	2.0	1.0	2.0	2.7	3.4	3.7	3.9	4.2	4.6	4.1	4.1	3.8	3.7	3.0	2.0
28	0.8	1.2	1.8	2.4	2.3	2.5	2.5	2.3	2.0	1.8	1.2	1.0	0.9	1.0	2.8	3.3	3.8	4.1	4.3	4.6	4.1	3.9	3.6	3.3	3.0	2.1
29	0.9	1.0	1.4	1.8	1.9	2.0	2.0	2.2	2.1	1.9	1.3	1.1	0.8	1.9	2.8	3.3	3.7	3.9	4.1	4.2	4.1	4.0	3.7	3.3	2.9	2.0
30	0.6	1.0	1.2	1.8	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.2	1.0	1.8	2.8	3.3	3.7	4.0	4.1	4.2	4.1	4.0	3.8	3.4	3.0	2.0
31	0.8	1.0	1.2	1.3	1.8	1.9	2.8	2.7	2.0	1.8	1.2	1.0	0.9	1.9	2.8	3.2	3.7	4.0	4.1	4.2	4.4	3.9	3.6	3.3	2.8	2.0
* MEAN	0.8	1.1	1.7	2.2	2.4	2.5	2.9	2.8	2.7	2.3	2.1	1.3	0.8	1.9	2.8	3.4	3.8	4.1	4.3	4.4	4.3	4.1	3.8	3.4	2.9	2.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 7

FEBRUARY 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1938

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	9.4	8.5	7.2	6.0	5.1	3.7	6.2	9.7	11.1	12.1	12.2	11.7	11.3	11.7	11.6	12.0	12.3	11.9	11.8	11.3	11.1	11.3	10.7	10.3	10.0
2	9.7	9.1	8.4	8.1	7.3	4.1	6.3	9.8	11.9	12.3	12.3	11.7	10.3	10.0	10.0	10.5	11.3	11.9	12.4	12.1	10.6	12.3	11.0	10.0	10.1
3	9.4	7.0	8.2	6.3	6.1	6.1	7.0	9.3	10.8	9.9	8.9	8.7	8.6	9.3	10.4	10.8	11.2	12.1	12.4	12.5	12.3	11.7	11.1	11.3	9.6
4	11.0	8.4	6.5	6.0	5.8	5.3	...c	...c	...c	11.7	11.0	10.0	10.2	10.3	10.8	11.3	12.1	12.8	13.6	13.6	12.2	11.0	11.3	11.6	...
5	10.2	7.7	5.6	4.2	2.8	2.3	5.9	9.4	11.2	12.0	11.2	10.2	10.5	11.2	11.2	10.9	10.7	10.4	10.7	11.0	10.5	9.3	10.0	11.2	9.2
6	10.3	7.3	9.7	12.6	11.6	6.7	8.0	10.5	12.0	...c	...c	13.6	12.0	10.9	10.9	10.7	10.8	11.3	10.8	11.5	11.0	10.7	9.7	9.3	...
7	10.0	7.9	6.7	6.3	6.3	6.2	7.7	10.4	12.0	12.7	12.3	12.7	13.7	13.8	13.7	13.2	12.5	12.0	10.8	10.0	11.5	11.8	11.2	11.5	10.7
8	11.5	10.0	9.5	6.0	5.7	5.6	7.1	9.2	11.8	12.8	...	11.4	9.1	9.9	11.2	12.2	12.3	11.3	10.3	10.8	9.8	9.6	9.5	...c	...
9	...c	...c	...c	...c	...c	...c	...c	...c	13.2	13.6	14.0	15.2	13.6	13.9	13.3	12.8	12.5	12.0	11.8	11.0	9.8	9.2	10.0	10.6	...
10	10.6	11.0	12.0	11.8	11.8	10.4	5.5	9.7	11.9	12.7	13.0	11.6	11.8	11.7	11.8	11.6	10.5	10.2	9.7	9.2	7.9	11.8	9.4	9.3	10.7
11	8.3	8.3	8.2	8.2	8.2	7.8	9.7	12.7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
12	...c	...c	...c	...c	...c	...c	...c	...c	...c	13.5	14.5	14.3	13.9	13.9	14.1	13.8	12.5	11.2	10.6	10.1	9.4	9.3	10.2	11.5	...
13	12.3	10.4	6.5	5.2	4.0	3.2	6.1	10.4	12.3	13.5	13.3	12.7	12.5	12.1	12.0	11.8	11.3	10.4	10.0	9.7	8.3	10.0	10.0	9.8	9.9
14	11.8	10.0	7.8	8.1	7.5	...c	...c	...c	...c	13.6	14.0	14.3	13.5	13.7	13.0	13.4	13.2	12.6	11.8	11.2	9.1	9.2	8.2	8.1	...
15	8.5	8.7	8.5	8.5	6.8	4.4	5.9	10.0	13.5	14.1	14.0	13.3	13.3	13.1	12.8	12.6	12.9	12.5	12.4	11.6	9.7	8.9	9.3	9.2	10.6
16	7.9	7.4	7.3	5.7	5.3	4.8	6.7	10.5	12.7	...c	13.6	13.5	12.5	12.5	12.3	11.8	12.2	11.8	11.2	13.1	8.1	14.0	8.2	7.8	...
17	7.8	7.0	6.8	6.4	6.4	5.8	6.7	10.2	11.8	13.3	13.5	13.0	12.2	11.9	11.8	12.0	12.4	12.3	12.0	12.0	11.2	10.1	9.7	8.8	10.2
18	9.5	9.6	9.6	7.8	6.4	5.7	6.3	...c	...c	13.4	13.9	13.2	13.2	13.0	12.7	12.1	11.8	11.0	10.7	10.4	8.5	11.5	9.5	9.2	...
19	9.3	8.2	6.8	6.5	5.3	4.0	5.7	9.8	12.4	13.3	13.6	13.2	12.1	11.8	11.4	10.8	10.4	10.2	9.1	9.5	8.2	11.8	9.8	10.4	9.7
20	8.3	9.5	6.0	6.2	5.9	5.8	7.0	10.3	12.5	13.7	13.6	13.2	12.3	11.6	11.3	11.3	11.0	10.7	10.6	10.5	9.3	9.2	11.8	11.0	10.1
21	11.3	8.6	9.7	6.6	7.2	...c	...c	...c	...c	12.9	13.5	13.4	12.5	11.8	11.2	10.8	10.7	9.8	9.2	9.1	11.7	11.7	10.3	10.2	...
22	9.1	9.2	4.7	4.5	4.2	3.5	5.8	9.3	11.2	12.6	13.3	12.8	12.9	12.5	12.3	12.0	11.8	10.5	9.8	8.9	7.9	12.0	8.7	12.0	9.6
23	9.0	10.0	9.2	7.0	6.8	5.3	6.8	10.2	12.2	12.9	13.3	13.6	13.2	14.4	13.8	13.6	13.6	12.6	11.2	10.2	9.9	10.2	9.6	9.6	10.8
24	9.5	9.9	9.7	8.9	9.0	8.2	8.0	9.8	11.8	12.9	13.3	13.4	13.3	13.4	12.9	13.2	12.6	12.0	9.6	9.5	9.3	8.7	8.2	9.5	10.7
25	9.5	9.6	8.3	6.3	5.6	5.0	6.2	9.5	11.1	12.1	...	...	12.5	13.6	13.8	13.6	13.2	12.7	11.7	10.0	9.4	9.0	...	9.8	...
26	9.6	9.3	8.8	7.2	7.4	5.3	6.0	9.4	11.5	13.1	13.6	13.6	12.8	13.1	13.6	13.8	13.4	12.2	11.0	8.9	8.7	8.3	7.9	7.9	10.3
27	7.8	8.9	7.9	7.2	6.4	4.7	5.6	9.53	11.8	12.6	13.6	13.6	14.2	14.6	15.0	15.2	15.2	15.4	13.6	12.5	11.3	13.0	12.0	12.5	11.4
28	10.6	10.7	8.9	7.8	7.5	6.3	7.1	10.3	11.9	12.5	11.8	11.5	11.9	12.8	13.4	13.9	14.3	14.3	13.5	12.8	12.4	12.0	12.5	12.8	11.4
29																									
30																									
31																									
MEAN*	9.7	8.9	8.0	7.1	6.6	5.4	6.7	10.0	11.9	12.8	13.0	12.7	12.2	12.3	12.3	12.3	12.2	11.8	11.2	10.8	10.0	10.6	10.0	10.2	10.4

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 8

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1938 FEBRUARY 1938

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	270	290	260	250	230	220	280	240	270	275	280	300	300	300	290	280	270	250	280	320	300	250	260	300	274
2	280	270	220	230	210	220	270	240	270	270	300	320	300	300	300	310	300	240	270	330	370	300	350	400	286
3	320	250	220	250	280	270	270	230	280	310	320	310	300	300	300	310	330	260	280	300	300	280	260	250	282
4	240	240	240	250	240	230	...c	...c	...c	280	320	300	300	310	300	300	310	250	270	300	340	310	290	250	...
5	230	220	230	230	220	250	260	270	270	290	290	300	350	300	310	270	260	260	270	310	330	270	270	240	271
6	220	220	330	300	300	280	270	240	260	...c	...c	300	300	300	290	250	250	260	280	260	350	370	320	290	...
7	250	240	240	260	270	300	270	250	270	280	280	390	290	290	290	270	260	250	280	330	400	420	390	290	294
8	230	220	220	240	240	270	290	250	270	270	...	280	270	280	290	280	280	260	270	310	360	320	300	...	...
9	...c	...c	...c	...c	...c	...c	...c	...c	260	280	300	305	300	280	280	280	260	260	270	310	400	400	360	300	...
10	300	290	290	350	430	430	280	240	270	270	270	280	300	280	270	270	310	270	280	350	340	390	340	270	307
11	250	250	250	240	250	280	280	260	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
12	...c	...c	...c	...c	...c	...c	...c	...c	...c	270	270	290	300	260	270	280	240	260	280	350	400	350	260	260	...
13	210	220	220	210	210	240	280	250	240	270	270	250	300	300	310	280	240	250	280	370	430	450	370	290	281
14	240	240	230	260	220	...c	...c	...c	...c	270	290	300	...c	270	260	280	240	260	300	370	400	410	370	300	...
15	230	220	220	...c	...c	...c	...c	...c	250	260	260	270	290	280	270	280	250	270	290	370	410	420	420	330	...
16	240	240	220	210	220	230	280	250	240	...c	280	280	290	300	280	270	260	260	290	290	430	470	350	270	...
17	260	210	250	230	230	250	280	250	240	270	270	270	280	280	270	300	280	250	280	370	380	370	310	300	278
18	270	230	230	210	220	230	...c	...c	...c	260	270	290	290	300	280	270	260	260	...c	360	305	310	300	250	...
19	220	230	240	240	210	220	270	250	260	260	270	280	280	260	270	270	240	250	280	380	440	340	250	250	269
20	230	205	250	250	250	240	260	250	250	270	280	260	270	300	290	280	260	260	290	380	410	310	350	270	278
21	230	240	240	230	210	...c	...c	...c	...c	280	300	305	300	310	300	300	260	240	280	350	400	410	300	230	...
22	220	230	240	230	220	240	270	240	240	280	280	270	270	280	290	270	260	250	280	380	410	360	250	240	271
23	240	230	250	240	220	220	270	250	270	270	280	280	p330	300	300	270	270	260	290	350	360	310	330	280	278
24	260	200	210	220	250	240	280	240	260	270	280	280	270	280	300	260	260	240	280	320	320	300	310	270	267
25	250	230	250	230	220	240	270	240	250	280	...	...	290	290	300	300	270	230	280	300	290	280	...	340	...
26	340	230	220	220	215	220	280	240	250	270	270	270	270	290	280	280	270	230	270	280	270	220	280	250	259
27	230	210	210	220	200	210	270	230	260	260	280	290	290	290	270	250	270	230	270	300	300	350	310	270	261
28	240	200	230	220	220	230	270	240	230	280	280	300	270	270	270	260	260	240	280	300	320	280	230	230	256
29																									
30																									
31																									
MEAN*	250	233	239	241	240	250	274	245	257	274	283	291	291	289	286	278	267	252	280	331	362	346	313	278	277

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 9

FEBRUARY 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1938

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	5.0	5.1	5.3	5.5	5.5	5.5	5.4	5.0	4.3	...	...
2	...	...	4.7	5.3	5.5	5.7	5.5	5.4	5.3	5.3	5.0	...	...
3	...	...	5.1	5.4	5.4	5.4	5.3	5.2	5.3	5.2	5.3	...	...
4	...	...	...	5.3	5.5	5.3	5.4	5.5	5.5	5.3	5.2	...	...
5	...	...	5.0	5.4	5.4	5.5	5.7	5.5	5.4	4.9	4.2	...	...
6	...	...	5.0	...c	...c	5.3	5.4	5.4	5.2	4.8	3.9	...	...
7	...	...	5.1	5.3	5.3	...a	5.2	5.4	5.4	5.1	4.5	...	...
8	...	...	4.9	5.1	...	5.4	5.5	5.4	5.3	5.2	4.6	...	...
9	...	...	4.8	5.5	6.0	6.0	6.0	5.4	5.5	5.2	4.5	...	...
10	...	...	5.0	5.5	5.3	5.5	5.8	5.4	5.3	5.2	5.3	...	...
11	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
12	...	...	...	5.5	5.5	5.9	6.0	5.5	5.5	5.5	...	...	...
13	...	...	...	5.2	5.5	5.5	6.0	6.0	6.0	5.3	...	...	...
14	...	...	...	5.1	6.0	6.0	5.3	5.5	5.2	5.0	...	...	...
15	...	...	...	5.3	5.4	5.7	6.0	5.8	5.2	5.4	...	...	...
16	...	...	...	...c	5.7	6.0	6.0	6.0	5.5	5.2	4.5	...	...
17	...	...	...	5.3	5.4	5.5	5.8	5.8	5.3	5.5	5.1	...	...
18	...	...	...	5.3	5.4	5.7	5.8	6.0	5.4	5.1	4.8	...	...
19	...	...	5.0	5.2	5.5	5.7	5.6	5.5	5.3	5.0	...	...	...
20	...	...	...	5.3	5.5	5.5	5.6	5.7	5.5	5.2	4.5	...	...
21	...	...	...	5.4	5.7	6.0	5.7	5.7	5.5	5.5	4.2	...	...
22	...	...	...	5.3	5.4	5.5	5.5	5.4	5.5	5.2	4.5	...	...
23	...	...	4.8	5.2	5.3	5.6	...a	5.5	5.4	5.1	4.7	...	...
24	...	...	4.7	5.3	5.4	5.5	5.5	5.5	5.4	4.6	4.4	...	...
25	...	...	4.5	5.3	...	...	5.5	5.3	5.4	5.3	4.6	...	...
26	...	...	4.8	5.2	5.3	5.3	5.4	5.6	5.3	5.2	4.7	...	...
27	...	...	4.7	5.2	5.3	5.7	5.7	5.3	5.3	4.7	5.0	...	...
28	...	...	...	5.4	5.5	5.7	5.1	5.4	5.0	5.0	4.6	...	...
29													
30													
31													
MEAN*	...	...	4.9	5.1	5.5	5.6	5.6	5.5	5.4	5.8	4.6	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	220	220	210	210	210	200	200	200	210	...	...
2	...	...	225	210	200	200	210	200	200	200	220	...	...
3	...	...	230	210	205	210	210	...b	200	200	210	...	...
4	...	...	...	210	210	205	205	200	200	200	205	...	...
5	...	...	230	220	220	220	210	200	200	200	200	...	...
6	...	...	200	...c	...c	210	210	220	210	220	220	...	...
7	...	...	230	230	220	...a	210	210	210	215	215	...	...
8	...	...	240	240	...	210	210	210	210	210	220	...	...
9	...	...	240	240	240	240	230	230	220	210	230	...	...
10	...	...	230	220	230	230	220	220	210	220	240	...	...
11	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
12	...	...	...	230	200	220	220	210	200	210	...	...	...
13	...	...	...	230	220	200	210	220	220	210	...	...	...
14	...	...	...	230	230	...c	...c	220	220	230	...	...	...
15	...	...	...	210	210	200	200	200	200	200	...	...	...
16	...	...	...	...c	210	210	210	220	200	210	210	...	...
17	...	...	...	240	230	230	205	200	210	220	230	...	...
18	...	...	...	220	210	210	210	210	205	205	220	...	...
19	...	...	230	230	220	220	210	210	210	200	...	...	...
20	...	...	...	230	210	200	210	200	210	210	220	...	...
21	...	...	...	220	220	210	210	205	220	200	200	...	...
22	...	...	...	230	220	210	200	200	210	200	210	...	...
23	...	...	230	220	220	210	...a	230	230	240	230	...	...
24	...	...	230	250	220	210	200	210	210	210	200	...	...
25	...	...	220	220	...	...	210	210	210	210	220	...	...
26	...	...	220	200	220	200	200	200	200	210	220	...	...
27	...	...	220	210	200	220	210	210	200	200	220	...	...
28	...	...	...	220	210	200	200	200	200	220	210	...	...
29													
30													
31													
MEAN*	...	...	226	224	216	212	209	209	206	210	217	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 10

FEBRUARY 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1938

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.5	0.9	1.1	1.7	1.9	2.0	2.2	2.1	2.0	1.7	1.7	1.1	1.0
2	1.0	1.1	1.8	1.8	1.9	1.9	2.0	2.1	1.9	1.8	1.8	1.0	1.8
3	0.5	1.1	1.2	1.8	1.9	1.9	4.9	2.4	1.8	1.2	1.2	1.2	1.0
4	...c	...c	...c	1.3	1.8	1.9	2.0	1.8	2.0	1.8	1.8	1.0	0.5
5	0.6	1.1	1.2	1.3	1.8	2.1	2.1	2.2	2.3	2.0	1.9	1.2	1.0
6	0.6	1.0	1.4	...c	...c	2.0	2.2	2.2	2.2	2.1	2.0	1.2	1.0
7	0.8	1.2	1.9	2.1	2.4	2.9	2.8	2.5	2.0	1.8	1.7	1.2	0.8
8	0.8	0.8	1.3	1.9	...	2.1	2.2	2.2	2.4	1.9	1.3	1.2	1.0
9	...c	...c	1.8	1.7	2.8	2.9	2.5	2.3	2.3	1.9	2.0	1.1	1.1
10	0.5	0.9	1.2	2.0	2.1	2.9	2.8	2.8	2.8	2.8	1.8	1.2	1.0
11	0.8	1.3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
12	...c	...c	...c	2.0	2.0	2.1	2.8	2.2	2.3	2.0	1.7	1.2	0.9
13	0.8	1.0	1.8	1.8	1.9	2.0	2.5	2.1	...	...	...	0.8	1.0
14	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.0
15	0.9	1.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	0.9
16	0.8	1.2	1.9	...c	2.6	2.8	2.8	3.0	3.9	2.8	1.9	1.2	0.9
17	0.9	1.1	1.9	2.0	2.2	2.7	2.8	2.6	2.6	1.8	1.2	0.9	0.9
18	...c	...c	...c	1.9	2.3	2.9	2.8	2.9	2.6	2.4	1.9	1.8	1.2
19	1.0	1.3	1.4	1.8	2.1	2.2	2.6	2.2	2.3	1.9	1.8	1.7	1.1
20	0.8	1.0	4.0	2.6	2.5	2.7	2.7	2.7	2.5	2.5	2.1	1.0	1.1
21	...c	...c	...c	2.0	2.7	2.7	2.8	2.7	3.6	2.3	1.8	1.2	0.8
22	0.5	1.0	1.2	1.8	2.2	2.7	2.7	2.7	2.7	1.8	1.2	0.8	1.1
23	0.7	1.0	1.1	1.9	2.0	2.6	3.1	2.3	2.2	1.9	1.4	1.4	0.8
24	0.8	1.0	1.0	1.8	1.9	2.5	2.8	2.8	2.3	2.1	1.7	1.1	1.0
25	0.8	0.8	1.4	1.8	...	...	1.8	1.8	1.8	1.7	1.2	0.8	0.6
26	0.6	0.8	1.0	1.2	1.5	1.5	1.8	1.8	1.8	1.3	1.0	0.6	0.6
27	0.8	1.0	1.1	1.3	1.7	3.5	1.8	1.7	1.8	1.3	1.0	1.0	0.8
28	0.6	0.8	1.0	1.2	1.8	2.0	2.2	2.0	2.7	2.0	1.8	1.3	0.8
29													
30													
31													
* MEAN	0.8	1.0	1.5	1.8	2.1	2.4	2.5	2.3	2.4	2.0	1.6	1.1	1.0

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.9	2.6	3.3	3.7	4.0	4.1	4.2	4.1	3.9	3.7	3.3	2.9	2.1
2	1.8	2.7	3.2	3.6	3.8	4.0	4.2	4.1	4.0	3.7	3.4	2.9	2.3
3	1.8	1.8	3.3	3.7	3.9	4.1	4.2	...b	4.0	3.7	3.4	3.0	2.0
4	...c	...c	...c	3.6	3.9	4.0	4.1	4.0	3.9	3.7	3.4	2.8	2.0
5	1.8	2.8	3.4	3.6	4.0	4.2	4.2	4.2	4.0	3.7	3.3	2.8	2.0
6	1.8	2.6	2.8	...c	...c	4.1	4.2	4.4	4.2	3.8	3.4	2.9	2.2
7	1.9	2.9	3.4	3.8	4.4	1.0	4.5	4.4	4.1	3.7	3.4	2.9	2.0
8	1.8	2.8	3.5	4.0	...	4.3	4.4	4.3	4.2	3.8	3.4	2.8	2.1
9	...c	...c	3.5	3.8	4.1	4.5	4.3	4.2	4.1	3.8	3.5	3.0	2.1
10	1.8	2.8	3.4	4.0	4.4	4.5	4.5	4.6	4.4	4.1	3.6	3.1	2.1
11	1.8	2.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
12	...	...	...	4.4	4.1	4.3	4.5	4.3	4.2	4.0	3.6	3.1	2.2
13	1.9	2.9	3.5	3.9	4.2	4.3	4.5	4.4	4.2	4.0	3.5	2.9	2.2
14	...c	...c	...c	3.8	4.1	4.4	4.3	4.5	4.1	3.9	3.5	2.9	2.0
15	1.7	2.8	3.5	3.8	4.2	4.4	4.2	4.3	4.1	3.8	3.5	3.0	2.1
16	1.9	2.9	3.6	...c	4.2	4.5	4.6	4.6	4.7	4.2	3.6	3.0	2.1
17	1.7	2.8	3.5	4.0	4.3	4.5	4.6	4.5	4.3	4.0	3.6	3.0	2.1
18	...c	...c	...c	3.8	4.2	4.5	4.5	4.5	4.3	4.1	3.6	3.0	2.0
19	1.7	2.8	3.5	3.9	4.2	4.3	4.5	4.3	4.2	3.9	3.5	2.9	2.0
20	1.8	2.8	...	4.1	4.2	4.4	4.5	4.4	4.2	4.0	3.6	2.9	2.0
21	...c	...c	...c	3.7	4.1	4.3	4.4	4.2	4.2	3.8	3.4	2.9	2.1
22	1.8	2.8	3.5	3.8	4.1	4.2	4.3	4.2	4.2	3.9	3.5	2.8	2.0
23	1.7	2.7	3.3	3.7	4.1	4.2	6.3	4.2	4.0	4.2	3.3	2.7	1.9
24	1.7	2.7	3.4	3.8	4.0	4.3	4.3	4.2	4.1	3.6	3.1	2.9	2.0
25	1.7	2.6	3.3	3.7	...	...	4.0	4.0	3.8	3.6	3.3	2.8	1.9
26	1.7	2.7	3.3	3.6	3.8	4.0	4.0	4.0	3.8	3.6	3.1	2.6	1.9
27	1.7	2.7	3.3	3.6	3.8	4.3	4.1	3.9	3.8	3.5	3.3	2.6	1.9
28	1.6	2.7	3.2	3.6	3.9	4.1	4.2	4.2	4.0	3.8	3.4	2.7	1.8
29													
30													
31													
* MEAN	1.8	2.7	3.4	3.8	4.1	4.3	4.4	4.3	4.1	3.8	3.4	2.9	2.0

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 11

LARCH 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

LARCH 1938

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	12.0	10.2	8.4	7.7	7.2	5.6	6.3	9.4	10.9	10.7	10.1	11.0	11.2	11.2	11.8	12.2	12.2	12.4	12.0	11.2	10.2	9.4	10.2	11.8	10.2
2	11.8	11.0	9.4	8.0	5.0	4.2	6.1	9.5	11.5	12.2	11.9	11.9	12.0	12.7	13.1	13.4	13.9	13.5	12.4	11.2	7.7	11.8	11.8	12.5	10.8
3	12.5	12.0	9.1	6.8	5.4	4.7	6.5	9.8	11.9	12.5	11.5	11.7	11.9	12.0	13.0	13.2	13.0	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	11.6	...	10.5	10.4	10.7	11.0	11.7	11.7	11.8	11.9	11.7	10.2	10.1	10.3	11.5	...
5	10.6	8.7	6.7	5.4	4.7	...	4.9	8.4	10.5	11.6	11.4	11.9	12.5	12.6	12.7	12.3	12.4	12.6	11.9	11.9	11.9	11.8	11.4	11.7	...
6	12.1	12.5	11.3	9.3	8.2	7.1	8.4	11.0	12.2	12.5	12.9	12.8	12.3	12.0	11.5	11.9	12.0	12.2	12.1	12.0	10.5	12.0	11.3	12.0	11.3
7	12.0	9.3	7.2	5.2	4.0	2.9	5.5	9.3	11.3	13.3	14.1	...	...	...	13.0	12.6	12.6	12.7	10.8	10.6	11.2	12.0	11.4	12.0	...
8	12.2	12.0	9.8	7.5	5.6	4.7	5.7	9.7	12.3	13.8	13.6	12.7	12.5	12.1	12.0	11.6	11.3	10.8	10.5	10.0	8.4	12.0	9.2	12.5	10.5
9	11.0	12.5	10.0	6.9	6.6	5.9	6.2	9.7	12.2	13.1	13.5	13.0	12.7	12.6	12.0	11.8	11.6	11.2	10.3	10.3	9.3	11.7	11.9	12.3	10.8
10	12.8	10.8	6.3	4.3	3.2	2.6	5.3	9.8	12.3	13.0	...	...	13.7	14.0	14.4	14.2	13.7	13.3	10.3	9.0	8.0	12.0	12.5	13.0	...
11	12.5	12.0	6.1	3.9	3.2	2.6	5.2	9.5	11.7	...	12.5	12.5	12.5	12.5	12.5	11.9	11.6	11.0	10.0	8.5	11.0	11.0	10.5	10.4	...
12	10.5	9.2	7.7	7.7	7.4	7.2	6.8	10.5	13.2	14.5	14.1	13.7	13.8	14.0	14.0	13.8	13.5	13.1	11.0	9.6	8.6	8.9	12.0	10.5	11.1
13	9.6	9.2	9.5	7.8	6.1	4.7	...	...	...	13.7	14.0	14.3	...	...	14.3	14.2	13.8	12.8	12.0	9.5	8.1	12.5	10.4	10.3	...
14	10.2	12.0	9.1	7.7	5.8	4.7	6.0	9.8	12.5	13.1	12.4	12.5	12.2	12.6	12.5	12.6	12.5	12.5	12.0	8.8	9.5	10.0	9.5	9.1	10.4
15	9.0	9.1	8.7	7.4	6.4	4.7	6.2	10.2	12.6	13.6	12.9	...	...	12.2	12.5	13.0	13.0	12.7	12.4	11.2	12.0	12.0	12.0	12.0	...
16	11.7	10.0	8.0	6.4	4.4	3.1	5.5	9.8	12.2	13.7	13.7	13.4	12.4	12.4	12.5	12.8	12.7	13.0	12.9	11.9	11.9	11.9	11.9	11.9	10.8
17	11.9	9.8	8.1	5.4	5.3	3.8	6.2	10.1	11.9	12.7	11.8	11.7	11.2	11.4	11.8	11.9	12.0	11.9	11.9	10.2	11.9	11.9	11.9	11.9	10.4
18	9.7	10.2	8.7	6.0	5.5	3.9	5.5	9.7	12.0	12.0	12.4	12.0	11.9	11.8	11.9	12.3	13.0	13.0	12.3	12.4	11.9	12.8	12.0	12.0	10.6
19	10.2	9.7	7.6	5.8	5.2	4.6	5.7	9.5	11.8	12.3	11.4	10.8	10.8	10.8	11.2	11.8	12.0	12.7	11.9	11.0	12.0	12.0	11.9	11.3	10.2
20	10.4	8.7	7.0	5.0	4.0	2.7	5.3	9.3	11.5	12.6	12.8	11.9	11.8	11.5	11.3	11.6	11.8	11.6	11.1	9.3	8.9	9.4	11.5	11.9	9.7
21	10.2	8.4	6.5	5.3	3.7	2.8	5.2	9.2	12.0	12.6	12.2	13.0	12.2	11.9	11.9	12.2	11.9	11.9	11.4	9.5	8.4	8.9	9.4	9.9	9.6
22	9.9	7.6	6.1	6.3	6.5	5.4	7.5	11.6	12.5	12.6	13.8	12.8	12.5	11.9	11.3	11.4	11.8	11.9	12.0	10.2	9.9	9.3	9.7	10.5	10.2
23	10.0	9.1	8.4	8.0	8.0	6.2	7.3	11.7	13.7	13.4	13.4	13.5	12.8	12.3	11.9	12.6	12.8	12.9	11.9	9.5	8.7	11.0	11.4	11.9	10.9
24	11.6	10.1	10.0	9.5	9.3	8.7	4.8	11.5	13.7	13.8	12.8	12.2	12.3	11.9	11.9	11.9	11.9	11.5	11.2	9.7	12.0	10.2	9.5	11.7	11.0
25	7.8	7.8	7.1	5.7	4.4	5.3	5.8	9.4	11.6	13.1	13.4	12.8	11.9	11.9	11.9	11.9	12.0	12.3	11.8	11.9	12.0	12.0	10.7	12.2	10.3
26	10.5	8.8	8.7	8.2	7.6	7.2	7.9	10.4	12.6	12.6	12.6	12.0	10.9	10.8	11.0	11.4	11.4	11.3	10.7	9.6	9.4	9.7	9.2	8.8	10.1
27	8.4	7.3	7.2	7.5	7.4	6.6	6.7	10.1	12.4	13.6	12.6	12.7	13.0	12.7	12.2	11.9	11.7	11.4	11.1	10.1	8.7	11.6	8.7	10.1	10.2
28	7.9	7.7	7.3	7.3	7.3	6.9	6.9	9.7	11.6	11.7	11.4	11.9	11.8	11.9	11.9	11.9	11.8	11.5	10.1	8.2	...	8.8	7.9	10.3	...
29	8.0	8.3	6.3	4.7	3.4	3.5	4.7	9.0	11.6	12.5	13.0	12.8	12.4	11.9	11.9	12.4	13.0	12.5	11.9	8.9	11.9	11.9	11.5	11.9	10.0
30	8.4	7.6	6.4	5.5	5.5	4.5	4.7	9.4	11.6	11.7	11.3	10.5	10.7	11.7	...c	...c	...c	...c	...c	...c	...c	11.9	10.8	12.5	...
31	10.7	7.6	5.5	4.0	4.3	1.9	4.8	9.1	11.0	11.3	10.2	9.6	10.0	10.6	11.6	12.3	12.7	12.4	11.9	10.7	9.3	11.9	11.2	11.2	9.4
MEAN*	10.5	9.6	7.9	6.5	5.7	4.8	6.0	9.9	12.0	12.7	12.5	12.2	12.0	12.0	12.2	12.4	12.4	12.2	11.6	10.3	10.1	11.1	10.8	11.4	10.4

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 12

MARCH 1938 | MARCH 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	210	230	230	240	230	220	280	250	260	280	290	270	280	280	270	260	230	260	280	330	390	380	340	280	274
2	230	220	210	210	210	260	280	240	230	260	270	290	280	280	270	270	230	250	270	380	450	370	330	310	275
3	240	210	215	210	230	240	280	240	260	290	290	280	280	270	260	240	240	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	270	...	290	300	300	300	270	260	260	280	350	390	350	280	280	...
5	270	210	240	220	370	...	280	260	280	280	300	300	280	290	280	270	250	260	280	280	280	270	280	290	...
6	280	250	240	270	250	280	290	260	270	280	280	280	280	280	280	260	240	270	290	370	430	410	320	250	288
7	220	220	250	250	230	230	270	240	260	260	270	...	...	...	270	270	250	270	280	330	300	270	250	250	...
8	230	220	220	220	230	220	270	240	270	270	280	280	280	290	270	260	260	250	270	370	430	400	280	270	274
9	220	210	220	220	230	230	270	250	240	270	280	280	290	280	280	270	280	250	290	380	390	360	260	210	269
10	200	200	210	210	230	240	280	250	260	260	...	...	280	270	270	270	260	250	290	400	420	380	360	240	...
11	210	210	210	240	250	250	270	240	250	...	260	290	300	290	270	260	260	250	290	450	520	320	250	220	...
12	210	220	240	250	250	220	270	250	260	300	300	260	260	260	270	280	260	250	300	380	410	350	310	250	275
13	240	230	230	300	220	220	...	...	...	250	260	260	...	...	270	270	260	260	300	420	460	370	300	250	...
14	230	230	230	220	200	230	280	250	250	270	270	260	280	260	280	280	260	250	300	460	510	350	330	260	281
15	240	230	230	230	220	230	270	250	260	270	260	...	...	300	280	280	270	250	300	470	560	460	310	260	...
16	230	220	220	220	230	230	270	250	260	270	270	250	290	290	270	270	260	270	300	450	490	330	310	250	279
17	220	230	220	210	230	220	270	250	260	270	270	270	270	270	270	290	260	250	300	450	470	400	270	250	278
18	230	210	220	220	230	230	270	240	260	270	270	260	280	270	270	260	240	250	300	450	460	360	310	250	275
19	210	230	230	230	240	230	270	250	260	270	280	280	280	280	280	270	250	270	310	400	490	370	320	280	282
20	230	210	220	230	230	230	260	250	260	260	280	280	270	280	280	260	260	260	300	470	470	320	310	210	276
21	210	210	230	220	250	250	270	270	260	270	280	280	280	270	270	270	250	260	300	410	430	330	250	220	272
22	210	220	260	380	330	290	280	250	260	270	280	270	280	280	290	270	250	260	300	480	470	280	260	250	290
23	210	230	270	270	260	240	280	250	250	270	270	260	280	270	270	270	260	260	300	420	330	230	230	230	267
24	240	250	250	290	300	260	290	250	250	270	280	260	270	270	280	260	250	260	280	320	370	270	220	220	269
25	220	220	210	230	230	250	260	250	260	270	280	280	280	290	280	260	250	250	280	330	330	320	310	220	265
26	240	250	260	260	250	240	250	240	260	270	290	290	290	290	280	260	250	250	300	310	220	200	220	200	257
27	210	240	250	240	230	210	250	240	250	260	280	280	300	280	260	250	250	240	290	360	390	260	230	210	261
28	220	230	250	220	220	230	270	240	250	260	270	290	280	280	280	250	260	250	300	400	...	300	250	210	...
29	210	200	210	230	230	250	260	230	250	280	270	280	290	280	270	260	240	260	310	400	310	250	270	200	260
30	220	200	230	220	240	250	270	250	260	260	300	290	300	280	...c	...c	...c	...c	...c	...c	...c	250	250	220	...
31	210	210	210	230	250	250	270	250	270	280	290	290	280	290	270	290	250	340	250	340	290	210	200	200	259
MEAN*	225	222	230	240	243	239	272	248	258	270	278	277	282	280	275	267	253	259	291	392	409	324	280	241	273

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 13

MARCH 1938 | IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY | MARCH 1938

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.7	5.3	5.5	5.4	5.5	5.3	5.0	4.2	...	...	...
2	...	...	...	5.3	5.4	5.5	5.4	5.3	5.2	5.0	...	...	...
3	...	...	4.5	5.5	5.5	5.5	5.4	5.4	4.9	4.4	...	...	...
4	...	...	...	5.4	...	5.5	5.6	5.6	5.6	5.0	...	...	...
5	...	...	5.1	5.5	5.6	5.5	5.4	5.4	5.3	4.7	...	...	...
6	...	...	5.1	5.3	5.6	5.5	5.5	5.3	5.3	4.7	...	...	...
7	...	...	5.0	5.2	5.4	...	...	...	5.2	5.2	4.1	...	...
8	...	...	4.7	5.3	5.5	5.6	5.5	5.5	5.3	4.8	4.2	...	...
9	...	...	...	5.5	5.5	5.5	5.7	5.7	5.4	5.3	4.8	...	...
10	...	...	4.9	5.3	...	...	5.7	5.5	5.3	5.1	4.7	...	...
11	...	...	4.9	...	5.4	5.8	5.8	5.7	5.4	5.1	4.6	...	...
12	...	...	...	5.0	5.1	5.5	5.5	5.5	5.5	5.3	4.5	...	...
13	...	...	...	5.3	5.4	5.3	...	...	5.4	5.1	4.4	...	...
14	...	...	...	5.4	5.4	5.5	5.8	5.5	5.4	5.3	4.4	...	...
15	...	...	5.0	5.3	5.3	...	...	5.3	5.5	5.4	4.8	...	...
16	...	...	4.7	5.3	5.4	5.5	5.9	5.8	5.3	5.2	4.5	...	...
17	...	...	4.7	5.3	5.4	5.5	5.6	5.5	5.5	5.5	4.0	...	...
18	...	...	5.0	5.5	5.5	5.5	5.6	5.6	5.3	4.7	...	...	...
19	...	...	5.0	5.4	5.5	5.6	5.6	5.5	5.4	5.2	...	...	...
20	...	...	4.8	5.3	5.3	5.4	5.5	5.5	5.3	4.8	4.2	...	...
21	...	...	4.5	5.3	5.4	5.5	5.6	5.4	5.2	4.7	4.0	...	...
22	...	...	4.8	5.0	5.4	5.3	5.4	5.5	5.5	4.7	...	...	...
23	...	...	5.0	5.3	5.5	5.5	5.6	5.4	5.3	5.0	4.5	...	...
24	...	...	4.2	5.4	5.3	5.3	5.2	5.3	5.3	4.7	4.0	...	...
25	...	...	5.0	5.3	5.4	5.4	5.5	5.5	5.4	4.9	4.0	...	...
26	...	...	5.1	5.5	5.6	5.6	5.5	5.5	5.3	4.7	4.0	...	...
27	...	...	4.8	5.0	5.3	5.6	5.7	5.4	5.2	4.7	4.4	...	...
28	...	...	4.8	5.2	5.2	5.5	5.4	5.4	5.6	4.7	4.2	...	...
29	...	...	4.8	5.5	5.4	5.5	5.6	5.5	5.3	4.6	...	...	...
30	...	...	4.5	5.3	5.6	5.6	5.6	5.4	...c	...c	...c	...c	...c
31	...	...	5.0	5.4	5.5	5.5	5.6	5.5	5.4	5.5	...	...	...
* MEAN	...	...	4.8	5.3	5.4	5.3	5.6	5.5	5.3	4.9	4.3	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	230	220	210	200	210	200	...	...	...
2	...	...	...	230	210	210	210	210	210	220	...	...	...
3	...	...	240	230	220	230	210	210	210	200	...	...	...
4	...	...	...	230	...	220	220	220	210	210	...	...	...
5	...	...	250	220	220	210	220	210	220	220	...	...	...
6	...	...	240	230	230	230	230	230	230	210	...	...	...
7	...	...	230	220	210	...	...	...	210	210	230	...	...
8	...	...	240	220	220	220	215	210	210	200	230	...	...
9	...	...	...	230	230	220	210	220	220	210	220	...	...
10	...	...	230	220	...	...	210	200	200	210	230	...	...
11	...	...	230	...	220	220	210	210	210	200	220	...	...
12	...	...	...	220	210	200	200	200	210	220	230	...	...
13	...	...	...	220	210	215	...	...	210	230	220	...	...
14	...	...	...	220	230	230	230	210	220	220	220	...	...
15	...	...	240	...b	220	...	...	200	220	220	230	...	...
16	...	...	230	230	230	220	220	220	210	210	230	...	...
17	...	...	240	240	230	220	220	220	220	230	230	...	...
18	...	...	240	230	230	220	220	220	200	210	...	...	...
19	...	...	240	230	220	210	210	210	210	230	...	...	...
20	...	...	240	240	220	220	210	210	210	210	230	...	...
21	...	...	230	230	220	210	210	210	200	210	230	...	...
22	...	...	240	230	230	230	220	210	220	220	...	...	...
23	...	...	230	230	240	220	220	230	210	240	240	...	...
24	...	...	240	230	230	220	220	210	200	200	250	...	...
25	...	...	240	230	220	220	220	210	210	210	220	...	...
26	...	...	230	220	220	220	220	220	200	200	210	...	...
27	...	...	240	230	220	220	220	210	200	200	200	...	...
28	...	...	230	210	210	210	220	220	210	210	240	...	...
29	...	...	230	230	230	200	220	200	200	220	...	...	...
30	...	...	240	220	220	210	220	200	...c	...c	...c	...c	...c
31	...	...	240	220	220	210	200	200	200	180	...	...	...
* MEAN	...	...	236	226	222	217	216	211	210	212	227	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 14

MARCH 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1938

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.7	1.1	1.4	1.7	2.0	2.0	2.6	2.3	2.0	1.8	1.4	1.2	0.8
2	0.8	1.0	1.2	1.7	2.2	2.3	2.3	2.7	2.1	2.0	1.2	1.0	0.8
3	0.8	1.1	1.7	1.8	2.7	2.7	...	...	...	...	...	...	...
4	...	...	...	2.2	...	2.7	2.7	3.1	3.0	2.8	2.7	1.9	1.5
5	1.3	1.4	2.1	2.6	2.8	3.0	4.6	3.2	4.4	2.7	2.0	1.5	1.8
6	1.8	1.9	2.0	2.7	3.0	3.6	3.6	3.4	3.0	2.6	2.0	1.3	2.2
7	1.8	1.8	2.6	1.7	1.9	...	...	...	2.2	1.8	1.7	...	0.8
8	0.8	1.2	1.4	1.7	2.7	2.7	2.7	2.3	2.2	1.8	1.5	1.1	0.8
9	0.8	1.0	1.3	1.8	2.2	2.9	2.8	3.5	2.7	2.1	1.8	1.0	...
10	...	1.2	...	...	...	...	2.5	2.2	1.8	1.8	1.4	1.1	0.8
11	0.8	1.1	1.3	...	2.0	2.1	2.2	2.1	2.0	1.8	1.8	1.1	1.1
12	0.6	1.1	1.3	1.6	2.0	2.6	2.7	2.7	2.1	1.7	1.7	0.8	1.0
13	...c	...c	...c	2.2	2.3	2.7	...	...	2.5	1.8	1.3	0.8	1.0
14	0.8	1.2	1.5	1.8	2.7	2.9	3.5	3.3	2.9	2.6	2.0	1.3	0.8
15	0.8	1.8	2.7	4.7	3.1	...	...	3.0	2.7	2.5	2.0	1.8	1.9
16	1.0	1.2	1.9	2.7	3.0	3.3	3.4	3.3	3.4	2.7	1.9	2.9	1.0
17	0.8	1.4	2.3	3.6	3.4	3.7	3.8	3.6	4.1	2.8	2.1	1.2	1.0
18	1.0	1.8	2.2	2.8	3.1	3.1	3.3	3.1	3.1	2.8	2.8	1.2	1.5
19	1.0	1.9	2.3	2.8	3.0	3.1	3.4	3.1	3.0	2.8	2.7	0.9	0.8
20	1.2	2.6	3.9	3.6	3.5	3.5	3.5	3.3	2.9	2.8	1.9	1.4	1.0
21	0.9	1.4	2.2	2.7	2.7	3.0	2.8	2.8	2.8	2.7	2.1	1.2	1.0
22	0.6	1.2	2.4	2.7	2.7	2.8	2.9	2.8	2.7	2.6	1.8	1.4	0.8
23	0.8	1.1	1.2	2.7	4.0	3.5	3.0	3.7	2.8	2.7	1.8	1.2	0.9
24	0.8	1.2	1.8	2.3	2.8	2.8	2.8	2.8	2.8	2.1	1.8	1.3	0.8
25	0.8	1.2	1.8	2.1	2.4	2.7	2.8	2.7	2.7	2.3	1.8	1.4	0.9
26	0.6	1.9	2.4	2.6	2.7	2.8	2.8	2.7	2.7	2.0	1.4	1.2	0.8
27	0.8	1.4	1.9	2.7	2.7	3.1	3.0	2.7	2.8	2.3	1.8	1.2	0.8
28	0.9	1.2	1.9	2.7	2.7	3.0	3.1	3.3	3.0	2.8	2.0	1.8	0.8
29	0.8	1.8	2.3	2.7	2.8	3.0	3.5	3.0	3.6	2.8	1.8	1.2	0.8
30	1.0	0.9	1.8	2.7	2.8	2.7	2.8	2.9	...c	...c	...c	...c	...c
31	0.8	1.0	2.6	2.8	2.8	3.0	3.0	3.0	2.7	2.2	1.8	1.2	0.8
MEAN*	0.9	1.4	2.0	2.5	2.7	2.9	3.0	3.0	2.8	2.4	1.9	1.3	1.1

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.7	2.6	3.3	3.6	3.9	4.1	4.2	4.1	3.9	3.7	3.4	2.7	1.8
2	1.7	2.6	3.2	3.6	3.9	4.1	4.2	4.1	3.9	3.7	3.3	3.7	1.8
3	1.7	2.6	3.2	3.7	3.9	4.1	4.3	4.2	4.1	3.9	3.7	...	...
4	...	...	...	3.8	...	4.4	4.4	4.4	4.2	3.9	3.8	2.9	2.1
5	1.8	2.8	3.5	3.9	4.2	4.4	4.6	4.4	...b	3.9	3.4	2.8	1.8
6	1.8	2.8	3.5	3.8	4.3	4.4	4.5	4.4	4.2	3.9	3.6	2.9	2.2
7	1.8	2.8	3.5	3.6	3.8	...	...	...	4.1	3.8	3.3	2.7	1.9
8	1.6	2.7	3.4	3.8	4.1	4.3	4.3	4.2	3.9	3.6	3.3	2.8	1.8
9	1.7	2.8	3.3	3.8	4.1	4.3	4.3	4.7	4.3	3.7	3.4	2.9	1.8
10	1.8	2.8	3.4	3.9	...	...	4.3	4.1	4.1	3.7	3.3	2.7	1.8
11	1.8	2.7	3.4	...	4.1	4.2	4.3	4.2	4.1	3.8	3.4	2.8	1.8
12	1.7	2.8	3.4	3.8	4.0	4.2	4.3	4.4	4.1	3.8	3.4	2.7	1.8
13	...c	...c	...c	3.9	4.2	4.3	...	...	4.1	3.8	3.4	2.9	1.8
14	1.8	2.8	3.5	3.9	4.3	4.4	4.5	4.4	4.3	4.0	3.5	2.9	1.8
15	1.8	2.8	3.5	...b	4.4	...	...	4.5	4.2	3.8	3.6	2.8	1.8
16	1.8	2.8	3.5	4.0	4.3	4.5	4.7	4.5	4.6	4.0	3.5	3.3	1.8
17	1.8	2.8	3.6	4.3	4.7	4.6	4.8	4.6	4.5	4.1	3.4	2.8	1.8
18	1.6	2.8	3.5	4.0	4.4	4.6	4.7	4.5	4.2	3.8	3.6	2.8	1.8
19	1.8	2.8	3.5	4.0	4.3	4.5	4.6	4.5	4.3	4.0	3.5	3.3	1.8
20	1.8	3.1	3.9	4.3	4.4	4.5	4.5	4.4	4.3	3.8	3.3	2.7	1.7
21	1.6	1.1	3.4	3.8	4.1	4.4	4.4	4.2	4.1	3.8	3.3	2.8	1.8
22	1.8	2.8	3.3	3.8	4.1	4.3	4.3	4.3	4.1	3.7	3.3	2.7	1.6
23	1.6	2.7	3.5	3.8	4.6	4.5	4.6	4.7	4.1	3.8	3.2	2.7	1.4
24	1.7	2.6	3.2	3.7	4.1	4.2	4.4	4.4	4.0	3.7	3.2	2.8	1.4
25	1.6	2.6	3.3	3.7	3.9	4.1	4.4	4.2	4.0	3.7	3.3	2.6	1.5
26	1.6	2.6	3.3	3.7	3.9	4.3	4.3	4.1	3.8	3.6	3.1	2.6	1.4
27	1.5	2.8	3.4	3.7	4.0	4.4	4.2	4.2	3.9	3.6	3.2	2.6	1.5
28	1.6	2.6	3.3	3.7	4.2	4.2	4.6	4.3	4.1	3.8	3.2	2.8	1.4
29	1.6	2.8	3.4	3.7	4.2	4.3	4.5	4.3	4.1	3.8	3.2	2.6	1.6
30	1.6	2.7	3.3	3.8	4.0	4.2	4.3	4.3	...c	...c	...c	...c	...c
31	1.3	2.8	3.4	3.8	4.0	4.3	4.3	4.4	4.0	4.5	3.7	4.0	1.4
MEAN*	1.7	2.7	3.4	3.8	4.2	4.3	4.4	4.3	4.1	3.8	3.4	2.7	1.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 15

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1938 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — APRIL 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	10.9	9.8	6.5	5.2	8.2	1.6	4.3	9.0	11.3	11.5	10.1	9.7	9.9	10.8	11.0	11.6	12.0	11.9	11.3	10.5	11.9	11.9	11.9	9.5	9.5
2	10.4	7.7	6.4	5.4	4.7	4.0	5.4	9.3	11.0	11.8	10.8	10.8	11.9	11.7	11.8	12.1	12.3	12.3	11.7	10.3	10.0	8.7	11.9	11.8	9.7
3	11.1	7.9	6.8	5.8	5.6	4.3	5.7	9.6	11.6	12.5	12.5	12.5	11.9	11.3	10.4	11.2	10.5	10.4	10.2	8.4	10.4	10.5	8.7	10.5	9.6
4	7.9	8.0	7.8	6.3	6.4	5.5	6.2	9.8	10.5	12.4	10.5	10.4	10.4	11.7	10.3	10.5	11.5	10.4	10.4	10.3	10.3	11.9	10.6	11.9	9.6
5	9.7	7.7	5.3	4.9	4.4	4.2	5.5	9.7	11.9	12.3	11.7	10.8	11.0	11.1	11.1	10.5	10.5	10.5	10.2	9.3	9.1	9.4	11.9	10.5	9.3
6	9.8	8.7	7.3	7.2	6.1	6.0	7.5	10.1	11.2	11.1	10.9	10.3	10.3	10.7	10.3	10.3	10.5	11.0	10.6	10.2	9.7	10.0	9.7	9.9	9.6
7	11.5	10.6	9.3	8.8	8.6	8.2	9.3	12.1	13.5	...b	...b	13.9	...b	10.4	10.5	10.4	11.6	10.4	10.3	10.2	9.1	9.8	10.4	11.2	...
8	11.1	9.4	7.3	6.9	5.2	4.2	5.7	9.8	12.0	12.9	11.6	12.5	12.2	11.9	11.8	11.9	10.5	11.1	10.0	8.8	9.3	10.5	9.7	8.1	9.8
9	9.5	6.4	6.2	5.7	4.9	4.2	5.9	9.9	12.2	12.5	13.4	13.4	12.7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
10	...c	...c	...c	...c	...c	...c	...c	...c	...c	14.0	13.6	12.8	13.0	13.7	13.4	13.7	13.2	12.4	11.9	9.3	11.9	10.4	11.5	8.8	...
11	8.6	9.3	8.0	5.6	5.8	3.3	5.5	9.5	11.8	11.8	11.9	11.8	11.9	12.3	13.0	13.5	13.3	12.6	12.2	10.3	9.9	11.4	9.9	9.3	10.1
12	10.1	10.6	9.4	8.5	7.0	6.3	7.2	10.4	11.9	11.3	11.8	11.8	11.9	11.8	12.2	10.5	10.5	10.3	10.2	8.9	7.9	9.7	11.9	11.5	10.2
13	11.6	10.0	8.9	5.8	5.8	4.2	4.9	9.3	12.6	11.9	11.7	11.9	11.9	12.2	13.1	13.3	13.0	12.8	10.3	8.9	10.3	9.6	9.6	10.7	10.2
14	10.5	10.4	10.1	9.3	9.7	9.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.9	8.0	...c	...c	...
15	...c	...c	6.7	7.7	6.8	5.7	7.1	10.5	12.4	13.7	12.6	12.2	12.7	13.2	13.4	13.6	13.5	13.2	12.2	11.3	11.1	11.5	11.2	11.0	...
16	11.5	9.7	...f	3.1	1.8	1.5	5.0	8.8	10.5	11.5	11.5	11.7	12.1	12.5	12.[illegible]	12.1	11.8	11.5	11.3	10.5	10.7	10.5	11.0	11.7	...
17	11.0	10.2	9.8	9.6	3.0	5.5	6.8	10.4	12.3	12.3	12.4	11.4	11.0	12.0	12.4	12.5	12.5	12.6	12.4	12.0	12.1	12.2	12.1	11.6	11.1
18	10.1	9.5	8.7	7.0	5.5	4.5	5.3	10.0	12.8	12.4	11.9	11.4	10.9	11.7	11.3	11.4	11.9	12.0	11.8	10.4	10.9	11.1	11.6	...c	...
19	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.8	...c	...c	...c	...c	11.9	11.4	11.4	11.0	9.8	9.3	9.1	9.2	9.1	...
20	9.2	8.2	6.9	6.4	5.9	4.4	5.7	9.9	11.3	...c	...c	11.3	10.4	10.2	10.2	...c	11.3	11.2	10.7	9.7	9.4	8.4	8.7	9.5	...
21	9.5	8.0	6.9	7.0	6.5	5.8	7.1	10.5	12.2	12.4	12.4	...c	...c	...c	...c	11.4	11.9	11.3	10.2	9.4	9.2	10.0	10.1	9.0	...
22	9.2	7.9	7.2	7.0	6.4	5.3	6.2	9.7	11.7	12.5	11.8	11.8	11.3	10.2	9.9	10.4	11.2	11.9	11.8	11.2	10.4	9.1	8.7	8.9	9.7
23	8.6	6.8	6.5	6.7	5.8	4.5	5.8	9.5	11.5	12.6	13.4	12.9	12.1	11.5	11.3	11.1	11.9	11.3	11.3	10.9	11.4	11.3	10.3	10.4	10.0
24	10.2	9.5	8.6	7.9	7.3	5.8	5.7	9.7	11.7	12.7	12.7	11.5	11.3	11.7	11.3	12.5	12.1	12.4	11.6	10.1	9.4	8.0	8.5	9.2	10.1
25	8.7	8.5	8.0	7.6	6.8	6.2	6.4	9.3	11.3	12.5	11.9	11.4	10.8	11.0	10.9	11.6	11.7	11.5	9.4	8.7	8.3	8.6	9.2	8.8	9.6
26	3.4	6.3	6.1	5.3	4.7	4.0	5.2	8.6	10.7	11.3	11.3	11.2	11.6	11.5	11.8	11.9	11.7	11.1	9.6	9.1	9.1	10.4	10.2	9.4	9.2
27	8.7	8.1	6.7	5.1	4.3	3.4	5.2	9.2	11.5	12.0	11.6	11.0	11.4	10.9	11.8	11.9	11.4	10.6	9.1	8.4	8.9	9.3	9.8	8.9	9.1
28	8.6	7.4	6.6	4.8	3.4	2.2	4.9	8.9	10.9	11.7	10.9	10.5	10.7	11.0	11.8	11.8	12.4	11.6	11.1	9.2	9.2	8.3	8.3	8.7	9.0
29	7.4	6.6	6.5	5.7	5.1	3.7	5.1	8.9	11.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.3	8.9	8.9	8.8	8.6	...
30	7.9	7.7	6.7	4.5	4.1	2.7	4.8	8.3	10.5	10.2	9.3	9.1	10.1	10.8	11.6	11.7	11.8	11.3	9.3	8.3	6.9	7.0	5.8	7.1	8.3
31																									
MEAN*	9.7	8.6	7.5	6.5	5.7	4.7	5.9	9.7	11.7	12.2	11.8	11.5	11.4	11.5	11.6	12.3	11.8	11.2	10.8	9.8	9.3	9.8	10.1	9.3	9.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 16

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1938 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — APRIL 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	200	210	230	220	230	250	260	250	250	280	280	290	280	290	280	250	240	250	300	350	300	310	210	250	261
2	230	200	230	220	230	220	260	240	260	280	230	280	280	280	280	270	240	250	300	420	380	320	310	240	271
3	220	210	230	240	230	230	260	250	260	270	270	280	290	300	290	300	260	250	300	450	400	340	250	230	275
4	210	230	230	240	230	230	250	250	250	270	230	300	280	270	280	250	260	270	310	400	340	260	230	210	264
5	220	230	240	230	240	230	260	250	250	270	280	280	300	290	280	260	260	270	310	360	350	230	250	220	265
6	220	230	250	230	230	270	290	260	260	280	290	230	300	270	270	250	240	260	300	350	310	280	230	220	265
7	210	220	250	260	260	240	250	240	250	...b	...b	280	...b	270	280	240	240	260	300	450	410	370	230	220	...
8	210	210	230	220	240	240	280	250	250	260	270	300	270	280	280	270	250	280	320	410	430	300	230	250	272
9	220	230	230	230	230	230	270	250	250	260	270	270	290	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
10	...c	...c	...c	...c	...c	...c	...c	...c	...c	270	280	270	270	300	280	250	250	270	320	450	400	380	300	210	...
11	230	240	230	210	230	230	280	250	250	270	280	290	270	270	250	250	250	270	320	370	340	270	230	240	263
12	250	220	220	230	240	220	270	250	260	270	270	300	280	270	290	280	250	270	320	410	410	350	340	250	280
13	210	210	220	230	220	230	250	250	250	270	270	280	280	280	280	270	250	270	330	380	280	280	240	230	261
14	230	250	280	300	360	300	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	400	330	...c	...c	...
15	...c	...c	240	230	210	220	260	250	250	270	260	260	260	260	250	260	250	270	310	410	350	[illegible]	240	220	...
16	210	210	...	280	...	...	300	250	260	260	260	270	270	280	270	230	250	260	300	340	310	260	240	220	...
17	230	220	230	220	210	220	250	240	250	250	260	270	260	260	260	260	250	260	310	310	260	230	220	200	247
18	200	200	210	210	225	225	260	250	250	260	260	270	260	280	230	270	250	270	310	350	290	270	220	...c	...
19	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	270	...c	...c	...c	...c	280	250	260	320	410	380	230	220	230	...
20	220	220	230	230	200	220	250	250	250	...c	...c	280	270	230	290	...c	250	270	330	330	350	280	220	220	...
21	210	220	250	230	240	230	270	250	250	270	280	...c	...c	...c	...c	300	250	270	320	340	300	230	240	220	...
22	220	220	230	250	250	250	270	250	260	270	270	290	290	280	270	280	250	260	310	330	350	290	230	220	266
23	220	230	230	220	230	230	260	250	260	270	270	280	280	280	280	270	240	240	310	300	290	240	240	230	256
24	230	220	230	230	220	220	260	250	260	270	270	230	280	280	270	260	250	260	300	350	370	330	[illegible]	240	264
25	220	230	220	240	230	230	260	250	[illegible]	270	230	280	290	230	290	250	250	270	310	330	[illegible]	250	[illegible]	230	260
26	220	230	220	220	230	230	290	250	250	260	270	280	230	280	290	250	260	260	320	360	300	240	230	220	260
27	220	220	220	220	230	230	270	250	260	270	270	230	230	290	290	270	250	260	320	390	270	240	220	220	260
28	220	220	220	230	230	250	270	240	250	260	270	290	300	290	310	270	250	280	340	390	360	290	220	220	269
29	220	240	230	220	230	230	270	250	260	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	380	330	260	240	220	...
30	220	220	220	220	220	240	270	240	260	280	290	290	290	280	280	[illegible]	250	[illegible]	330	400	360	340	240	220	272
31																									
MEAN*	219	222	231	232	234	235	267	249	254	268	274	282	280	280	273	266	250	264	314	377	343	285	240	226	265

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 17

APRIL 1938 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — APRIL 1938

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.5	5.3	5.5	5.6	5.5	5.5	5.3	4.7	...	...	...
2	...	...	5.0	5.4	5.5	5.5	5.6	5.6	5.4	5.3	...	...	...
3	...	...	5.5	5.5	5.4	5.5	5.6	5.6	5.5	5.4	4.4	...	...
4	...	...	4.8	5.4	5.5	5.8	5.6	5.4	5.3	4.7	4.3	...	...
5	...	...	4.5	5.4	5.4	5.5	5.8	5.5	5.3	4.7	4.7	...	...
6	...	...	4.6	5.6	5.8	5.8	6.0	5.4	5.4	4.8	...	...	...
7	...	...	5.3	...b	...b	5.6	...b	5.5	5.5	4.2	...	...	...
8	...	...	4.5	5.1	5.5	6.0	5.5	5.5	5.5	4.9	...	...	...
9	...	...	4.8	5.1	5.4	5.4	5.9	...c	...c	...c	...c	...	...
10	...	...	...c	5.4	5.5	5.4	5.5	5.9	5.3	4.5	4.0	...	...
11	...	...	4.7	5.3	5.8	6.0	5.5	5.3	5.0	4.5	...	...	...
12	...	...	4.5	5.4	5.4	5.9	5.8	5.4	5.5	5.2	...	...	...
13	...	...	4.5	5.3	5.4	5.4	5.6	5.4	5.4	5.3	...	...	...
14	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
15	...	...	4.7	5.3	5.3	5.4	5.5	5.4	5.0	4.7	4.2	...	...
16	...	...	4.6	5.1	5.2	5.3	5.4	5.5	5.4	5.3	...	...	...
17	...	...	4.5	5.2	5.4	5.5	5.5	5.5	5.1	4.8	...	...	...
18	...	...	4.5	5.3	5.4	5.4	5.4	5.6	5.5	5.0	...	...	...
19	...	...	...c	...c	5.5	...c	...c	...c	...c	5.5	...	...	...
20	...	...	5.3	...c	...c	5.5	5.5	5.4	5.3	...c	...	...	...
21	...	...	4.2	5.2	5.6	...c	...c	...c	...c	5.5	...	...	...
22	...	...	4.5	5.5	5.4	5.6	5.6	5.3	5.2	5.2	...	...	...
23	...	...	5.5	5.1	5.2	5.4	5.4	5.4	5.3	...b	5.0	4.5	...
24	...	...	5.1	5.0	5.3	5.5	5.5	5.4	5.2	4.6	...	...	...
25	...	...	4.8	5.4	5.6	5.6	5.3	5.4	5.4	...	...	...	...
26	...	...	...	5.1	5.6	5.5	5.5	5.5	5.5	...	...	...	...
27	...	...	5.0	5.4	5.3	5.4	5.4	5.4	5.4	5.0	...	...	...
28	...	...	4.8	5.0	5.2	5.4	5.6	5.5	5.4	4.9	...	...	...
29	...	...	5.0	...c	...c	...c	...c	...c	...c	...c	...	...	...
30	...	...	4.8	5.4	5.4	5.5	5.6	5.4	5.4	5.0	...	...	...
31													
MEAN*	...	...	4.8	5.1	5.4	5.6	5.6	5.5	5.4	4.8	4.4	4.5	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	210	200	200	200	200	230	...	...	...
2	...	...	240	230	220	210	230	230	220	230	...	...	...
3	...	...	240	230	220	220	220	210	200	220	240	...	...
4	...	...	240	240	240	230	240	220	220	230	240	...	...
5	...	...	240	220	220	220	220	210	210	220	230	...	...
6	...	...	240	230	210	210	220	200	220	200	...	...	...
7	...	...	230	...b	...b	240	...b	240	210	220	...	...	...
8	...	...	240	240	230	240	230	220	230	230	...	...	...
9	...	...	240	240	230	230	230	...c	...c	...c	...c	...c	...
10	...	...	...	230	230	220	230	220	210	210	230	...	...
11	...	...	240	220	220	220	230	220	220	220	...	...	...
12	...	...	240	230	230	220	230	220	230	240	...	...	...
13	...	...	240	220	220	220	230	230	220	230	...	...	...
14	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
15	...	...	240	230	230	225	220	220	220	230	230	...	...
16	...	...	230	230	220	220	230	220	220	230	...	...	...
17	...	...	230	220	210	200	210	220	225	230	...	...	...
18	...	...	230	220	220	210	210	220	210	220	...	...	...
19	...	...	...c	...c	240	...c	...c	...c	...c	230	...	...	...
20	...	...	240	...c	...c	230	230	220	210	...c	...	...	...
21	...	...	240	230	230	...c	...c	...c	...c	230	...	...	...
22	...	...	240	220	220	230	220	200	210	240	...	...	...
23	...	...	240	250	230	230	230	230	230	...b	210	220	...
24	...	...	240	230	230	230	220	210	210	220	...	...	...
25	...	...	240	230	230	230	220	240	230	...	...	...	...
26	...	...	...	230	230	240	240	230	240	...	...	...	...
27	...	...	240	230	220	230	230	220	230	240	...	...	...
28	...	...	230	230	230	230	230	220	230	210	...	...	...
29	...	...	240	...c	...c	...c	...c	...c	...c	...c	...	...	...
30	...	...	240	220	230	230	220	220	210	230	...	...	...
31													
MEAN*	...	...	238	229	225	224	225	226	219	226	230	230	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f°F2 EQUAL TO OR LESS THAN f°F1   h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 18

APRIL 1938 APRIL 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.9	1.0	1.8	2.0	2.8	2.9	3.1	3.0	2.7	2.8	1.8	1.4	0.8	1.8	2.8	3.3	3.7	4.0	4.3	4.3	4.3	4.1	3.9	3.4	2.6	1.5
2	1.0	1.4	1.9	2.8	3.1	3.4	3.7	3.4	3.0	2.6	1.8	1.3	0.9	1.8	2.8	3.4	3.9	4.3	4.4	4.6	4.4	4.2	4.1	3.3	2.6	1.5
3	0.9	2.0	2.8	2.7	2.8	2.9	3.1	3.0	2.8	2.7	1.9	1.2	0.9	1.8	2.7	3.5	4.0	4.1	4.2	4.3	4.2	4.0	3.7	3.1	2.5	1.4
4	0.9	1.9	2.8	2.8	3.1	3.9	3.6	3.0	2.8	2.8	1.9	2.5	0.8	1.8	2.8	3.9	4.0	4.3	4.5	4.8	4.5	4.2	3.8	3.2	3.1	1.4
5	0.9	1.2	2.7	2.7	2.9	3.1	3.1	3.0	3.0	2.7	1.8	1.2	0.8	1.9	2.8	3.5	3.8	4.2	4.3	4.4	4.3	4.2	3.7	3.2	2.8	1.4
6	0.8	1.2	2.1	2.8	3.0	3.7	3.6	3.1	3.1	2.8	2.8	1.4	1.0	1.8	2.8	3.4	3.9	4.3	4.6	4.6	4.4	4.3	3.8	3.4	2.8	1.4
7	0.8	1.3	2.6	...b	...b	4.8	...b	4.8	2.9	2.7	1.9	1.2	0.8	1.8	2.9	3.5	...b	...b	4.8	...b	4.8	4.2	3.7	3.3	2.8	1.5
8	0.8	1.2	2.1	2.8	3.0	3.5	4.1	3.4	3.6	2.8	2.7	1.2	0.8	1.8	2.8	3.4	4.1	4.3	4.6	4.8	4.4	4.4	3.8	3.5	2.6	1.5
9	0.9	1.2	2.3	3.1	3.3	3.4	3.1	...c	...c	...c	...c	...c	...c	1.7	2.8	3.5	3.9	4.4	4.4	4.5	...c	...c	...c	...c	...c	...c
10	...c	...c	...c	2.7	3.1	3.3	3.5	3.0	2.8	2.8	1.9	1.4	0.9	...c	...c	...c	4.0	4.3	4.3	4.6	4.3	4.2	3.8	3.3	2.7	1.4
11	0.9	1.2	2.8	3.1	3.1	3.5	4.3	3.4	3.0	2.8	1.8	1.2	1.2	1.8	2.8	3.6	4.2	4.3	4.5	4.7	4.3	4.3	3.9	3.3	2.8	1.8
12	0.8	1.2	1.9	2.8	3.0	3.3	3.1	3.4	3.3	2.9	2.7	1.4	0.8	1.8	2.8	3.4	3.9	4.3	4.3	4.6	4.6	4.4	4.0	3.3	2.6	1.4
13	1.4	2.0	2.8	2.8	3.3	3.5	3.4	3.4	3.3	2.7	2.0	1.2	0.8	1.4	3.0	3.6	4.0	4.3	4.5	4.7	4.5	4.3	3.8	3.3	2.6	1.4
14	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
15	0.8	2.7	3.4	4.0	4.0	4.0	3.7	3.6	3.3	2.7	1.9	1.2	0.8	2.0	3.2	3.8	4.0	4.0	4.0	3.7	3.6	4.4	3.8	3.3	2.6	1.4
16	0.8	1.1	2.1	2.7	2.8	3.0	3.6	3.1	2.8	2.7	1.8	1.2	0.9	1.8	2.8	3.5	4.0	4.2	4.4	4.6	4.4	4.1	3.7	3.4	2.6	1.4
17	0.9	1.2	1.3	2.7	3.0	3.1	3.3	3.6	3.0	2.7	2.1	1.2	0.8	1.7	2.8	3.4	3.8	4.3	4.4	4.4	4.6	4.1	3.7	3.3	2.5	1.2
18	1.7	2.0	1.9	2.7	2.8	3.2	3.1	3.1	2.8	2.7	2.8	1.4	0.6	1.7	2.8	3.4	3.8	4.1	4.3	4.4	4.3	4.1	3.7	3.2	2.5	1.4
19	...c	...c	...c	...c	3.8	...c	...c	...c	...c	3.6	2.8	1.6	0.9	...c	...c	...c	...c	4.5	...c	...c	...c	...c	4.1	3.7	2.6	1.2
20	1.4	2.6	4.4	...c	...c	3.6	3.8	3.4	3.4	...c	2.2	1.4	1.3	1.9	3.5	4.4	...c	...c	4.5	4.5	4.5	4.4	...c	2.9	2.6	1.3
21	0.9	1.2	2.2	2.8	2.7	...c	...c	...c	...c	2.8	2.1	1.4	1.1	1.7	2.7	3.7	3.8	4.2	...c	...c	...c	...c	4.0	3.5	2.5	1.4
22	1.8	1.2	2.3	2.8	3.8	4.0	3.9	4.1	2.8	2.8	1.8	1.5	1.0	1.8	2.7	3.5	4.0	4.4	4.7	4.6	4.5	4.3	4.0	3.5	2.8	1.2
23	1.5	2.8	2.8	4.6	4.1	4.6	4.1	4.2	3.0	...b	2.8	1.8	1.1	1.8	3.5	3.8	4.6	4.5	4.6	4.7	4.5	4.3	...b	3.8	2.8	1.3
24	1.8	1.0	2.8	3.7	3.7	4.0	3.7	3.6	3.2	2.8	1.8	1.4	1.0	1.8	2.8	4.0	4.1	4.3	4.4	4.3	4.3	4.1	3.8	3.4	2.5	1.2
25	0.9	1.4	2.8	2.9	3.3	3.8	4.0	3.6	4.1	3.7	2.8	1.8	1.0	1.8	3.1	3.7	4.0	4.2	4.4	4.5	4.3	4.4	4.2	3.7	3.0	1.4
26	0.9	1.2	4.6	3.0	3.7	3.5	3.9	4.5	3.7	3.1	1.8	1.5	1.1	1.8	3.2	4.6	4.1	4.3	4.7	4.7	4.7	4.4	4.0	3.6	2.8	1.2
27	1.8	2.5	2.8	3.1	4.1	3.7	3.9	3.6	3.4	2.8	2.7	1.4	1.2	1.8	3.0	3.7	4.1	4.4	4.2	4.4	4.4	4.4	3.9	3.4	2.7	1.2
28	2.0	1.8	2.2	2.8	3.5	3.6	3.4	3.6	3.8	3.4	2.5	1.4	1.4	2.0	3.0	3.7	4.1	4.3	4.5	4.7	4.6	4.4	3.8	3.4	...	1.4
29	1.5	...	3.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.5	3.3	3.7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
30	1.8	1.8	2.2	3.0	3.4	3.7	3.8	3.8	3.8	2.9	2.8	1.5	1.0	1.8	2.8	3.3	4.0	4.2	4.4	4.4	4.5	4.3	4.0	3.5	2.8	1.2
31																										
* MEAN	1.2	1.6	2.6	3.0	3.3	3.6	3.6	3.5	3.2	2.9	2.2	1.4	1.0	1.8	2.9	3.6	4.0	4.3	4.4	4.5	4.4	4.3	3.9	3.4	2.7	1.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 19

MAY 1938 MAY 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	8.3	7.4	6.3	4.5	3.6	3.5	5.5	9.3	11.4	11.7	11.5	10.1	10.3	10.2	10.4	10.3	10.7	10.3	9.8	8.3	9.3	10.1	9.3	9.2	8.8
2	8.6	8.3	6.1	5.2	3.9	3.5	5.3	8.6	11.2	11.9	11.9	11.9	9.8	9.9	10.0	10.2	10.2	9.4	9.1	8.3	8.2	8.3	9.7	10.8	8.8
3	7.8	7.2	6.8	6.3	6.1	6.2	7.2	10.2	12.5	11.0	11.9	11.8	10.0	10.2	10.8	10.8	11.2	10.8	8.7	8.3	8.7	9.6	6.8	7.7	9.1
4	8.4	8.8	8.7	7.6	6.3	6.5	7.1	9.0	10.9	11.3	11.1	9.2	11.2	11.2	10.5	9.9	9.5	10.3	10.8	10.3	10.4	10.8	10.0	9.6	9.6
5	9.9	8.9	7.4	6.8	6.4	5.7	5.5	9.4	11.7	12.7	12.4	...	11.2	11.3	11.6	11.4	11.3	10.4	8.7	6.7	8.7	9.7	9.1	8.9	...
6	8.5	6.8	6.7	6.0	6.0	5.2	6.3	9.9	12.4	12.9	12.3	12.1	11.5	11.6	11.0	10.5	10.3	10.0	9.5	8.7	8.4	8.2	7.7	6.8	9.1
7	6.7	6.3	5.8	4.7	4.6	4.5	...c	...c	...c	12.3	12.1	12.0	10.8	10.9	11.8	11.7	11.4	11.3	9.6	8.4	7.9	7.9	8.0	8.4	...
8	8.5	6.8	6.5	6.2	5.8	5.2	6.2	9.5	11.2	11.5	11.6	11.6	10.8	10.3	9.8	9.8	9.3	9.1	8.9	8.6	8.4	8.3	8.0	8.5	8.8
9	8.7	8.2	8.1	6.1	4.6	3.2	5.3	9.0	11.1	11.7	11.9	11.9	11.5	11.8	11.1	10.5	10.3	9.6	8.8	8.7	8.9	9.5	8.8	8.9	9.0
10	9.6	9.0	8.6	7.3	6.1	5.4	6.0	9.2	10.8	11.5	11.8	11.3	11.3	10.9	11.4	11.1	10.4	9.9	9.2	8.6	8.8	8.7	7.9	7.8	9.3
11	8.2	8.1	7.7	7.2	6.2	5.3	6.3	8.9	10.2	11.2	11.5	11.9	11.7	10.5	9.2	10.8	10.3	10.1	9.8	10.0	10.3	11.1	7.4	6.9	9.2
12	6.7	6.5	5.6	6.8	7.0	6.2	5.0	9.7	13.2	13.4	13.5	13.7	13.5	13.5	13.5	13.2	12.7	10.8	9.5	8.4	9.3	9.0	9.0	8.9	9.9
13	8.2	8.1	7.3	5.1	3.8	2.5	4.9	8.8	11.0	11.9	11.9	11.8	11.5	11.4	11.6	11.5	10.9	10.8	9.6	8.4	7.9	7.7	7.4	6.8	8.8
14	6.9	7.2	6.3	5.7	5.1	4.8	5.6	9.0	10.5	12.9	12.5	12.2	11.1	9.8	9.8	10.2	10.3	9.7	9.2	7.5	11.5	7.7	9.0	6.6	8.8
15	7.0	7.2	6.8	7.1	6.6	7.0	8.2	11.0	12.2	12.3	11.5	9.3	9.1	8.9	9.2	9.8	10.1	10.6	10.4	9.3	9.4	9.9	8.9	8.7	9.2
16	8.2	...c	...c	...c	6.5	6.4	7.3	10.8	12.2	12.0	10.2	9.5	9.8	9.5	9.7	9.3	9.6	10.1	9.4	9.0	8.9	8.8	8.4	8.9	...
17	8.1	6.3	6.2	5.3	5.1	5.3	6.2	9.1	11.4	11.9	11.7	11.3	10.5	10.3	9.7	9.5	9.8	10.5	10.1	9.2	9.1	...c	8.6	8.6	...
18	7.9	6.3	6.0	5.1	4.7	4.7	5.9	8.8	10.8	11.9	12.0	10.6	10.1	9.8	9.9	10.3	10.1	10.3	9.6	9.2	8.8	8.2	7.5	7.5	8.6
19	7.5	7.3	6.5	5.0	4.0	2.8	4.8	8.0	9.8	10.7	10.4	9.6	9.5	9.6	10.2	9.8	10.0	10.0	9.6	8.5	8.1	7.3	7.0	7.4	8.1
20	6.8	5.9	5.5	4.4	3.4	2.5	4.4	8.1	10.4	10.9	10.9	10.0	8.9	8.8	9.0	9.3	9.4	9.8	9.6	9.1	9.3	9.5	9.1	7.8	8.0
21	7.4	7.2	5.9	4.6	4.1	3.7	5.0	8.4	10.2	11.3	11.5	10.6	10.3	9.7	9.8	9.9	9.6	9.1	8.5	8.3	8.0	7.2	6.3	6.3	8.0
22	6.1	6.2	5.4	4.6	4.6	4.1	5.5	8.6	10.5	11.5	11.7	9.0	9.8	9.6	9.6	9.9	9.6	9.9	9.4	8.9	9.4	8.8	7.0	6.6	8.2
23	6.2	6.2	5.8	5.6	5.7	5.1	5.9	8.8	10.2	10.5	10.0	9.8	9.8	9.4	9.4	9.7	9.2	8.9	8.2	7.0	7.3	7.6	8.0	7.7	8.0
24	7.4	6.4	4.9	4.2	3.3	2.8	4.6	7.9	9.6	10.8	10.6	10.4	9.6	10.1	10.9	11.5	11.2	9.7	7.9	7.3	8.0	7.9	6.9	7.2	8.0
25	7.2	7.1	7.5	6.7	6.7	6.3	6.4	8.4	9.5	9.9	9.9	10.2	10.7	11.1	10.7	10.1	9.1	8.8	8.0	7.8	8.2	7.8	7.4	8.1	8.5
26	7.6	7.8	7.8	7.5	6.9	6.2	6.5	7.1	9.3	9.9	9.7	10.0	10.4	9.8	10.1	10.2	9.8	9.5	8.7	8.1	8.3	8.1	7.3	7.0	8.5
27	7.3	6.9	7.8	6.9	6.0	5.6	6.2	7.7	9.6	10.0	9.5	9.7	9.8	9.3	10.1	10.4	10.5	10.3	9.3	7.8	8.6	9.3	9.3	8.8	8.6
28	7.0	5.9	4.3	3.4	3.9	5.5	3.6	7.1	9.0	9.6	9.4	9.4	9.9	10.5	10.7	10.7	10.6	10.3	10.0	...c	...c	...c	...c	...c	...
29	...c	...c	7.6	6.5	4.6	4.7	5.6	7.5	10.0	10.1	10.5	10.5	10.3	10.6	10.4	9.5	9.2	8.9	8.4	7.4	8.0	8.1	8.0	8.4	...
30	8.2	7.8	6.6	3.5	2.5	1.8	4.2	8.0	9.4	10.2	11.2	11.6	11.6	10.4	10.2	10.3	10.2	9.5	9.3	8.2	8.4	8.6	7.8	7.6	8.9
31	7.3	7.7	7.3	6.0	4.7	3.7	4.7	7.6	9.2	10.1	9.5	8.3	9.0	8.7	8.8	9.4	10.3	10.7	10.3	9.6	9.0	8.6	7.6	6.9	8.1
MEAN*	7.7	7.2	6.7	5.7	5.1	4.7	5.7	8.8	10.7	11.3	11.2	10.7	10.5	10.3	10.3	10.4	10.2	10.0	9.3	8.4	8.8	8.7	8.1	8.0	8.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 20

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1938 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — MAY 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	220	220	240	240	240	270	240	260	260	280	300	290	280	250	260	260	280	320	370	290	240	220	220	261
2	210	210	220	230	230	240	260	240	250	270	270	290	300	280	300	250	250	270	330	390	340	300	250	220	267
3	230	230	230	250	280	250	240	260	270	280	280	280	280	290	290	280	260	280	350	360	340	330	250	230	276
4	220	240	220	220	250	270	300	250	260	270	280	270	290	280	280	260	250	270	300	300	270	240	230	230	261
5	220	220	230	240	220	220	240	250	260	260	260	...	260	280	270	270	270	260	350	330	290	230	230	220	...
6	210	220	230	250	230	230	270	250	250	260	270	270	290	290	280	260	250	270	330	390	380	300	240	220	268
7	210	210	220	220	230	230	260	250	270	270	270	280	280	280	280	260	250	270	330	360	350	260	230	230	262
8	210	230	230	230	220	230	260	250	260	270	280	270	270	280	270	260	250	270	310	350	300	260	230	210	258
9	200	210	210	210	220	240	280	240	260	260	270	280	280	280	290	280	260	280	320	340	290	240	240	220	258
10	200	240	240	230	240	230	270	250	250	270	290	280	280	290	280	270	240	270	330	350	260	250	230	240	262
11	210	210	220	220	220	220	280	240	260	270	250	300	280	300	270	260	260	290	350	330	230	230	240	260	258
12	280	300	370	450	470	470	300	250	250	250	270	270	260	270	280	260	250	270	330	400	330	280	230	220	305
13	230	230	220	220	230	250	290	250	260	260	270	270	260	280	290	280	250	270	340	380	330	280	240	230	267
14	220	230	220	210	220	250	250	250	250	270	270	290	300	300	300	280	250	260	360	430	370	300	290	250	276
15	220	240	260	260	280	240	250	250	250	260	280	290	300	300	300	300	250	270	330	340	280	250	210	210	268
16	210	210	230	260	250	260	260	250	260	280	280	290	300	300	290	300	270	260	320	350	330	260	230	230	270
17	220	230	240	260	300	280	260	240	260	270	280	310	300	300	300	270	250	260	300	310	310	...c	230	220	...
18	220	220	210	240	250	250	280	250	260	280	300	300	300	300	300	260	260	260	310	350	300	290	250	240	270
19	220	210	210	220	230	230	260	240	260	280	300	310	290	310	290	280	260	260	310	370	340	280	230	220	267
20	210	210	220	240	230	250	270	250	260	290	280	290	290	270	260	260	260	260	300	300	300	250	230	220	258
21	220	220	220	230	240	260	280	250	270	300	320	320	320	310	300	260	250	270	330	350	350	300	270	230	278
22	220	230	230	240	240	240	250	240	270	280	290	270	350	370	330	280	250	250	310	340	290	250	240	230	270
23	230	220	250	250	250	250	280	260	270	270	300	300	300	290	300	280	240	260	330	370	300	250	220	210	270
24	210	210	230	220	230	230	270	250	280	280	290	310	300	300	320	320	260	270	340	330	290	240	210	230	268
25	230	240	230	250	250	250	280	250	260	280	290	300	290	290	290	270	270	260	330	330	270	220	220	230	266
26	230	230	250	240	230	230	240	250	250	270	280	280	280	300	300	250	260	260	330	360	300	260	230	240	265
27	230	230	230	230	250	240	290	250	270	280	280	260	300	300	310	280	260	260	330	350	300	250	210	210	268
28	220	215	210	280	340	380	300	250	280	300	290	290	300	290	270	270	260	270	300	...c	...c	...c	...c	...c	...
29	...c	...c	230	220	250	270	300	250	270	270	270	280	290	280	280	270	270	270	330	390	300	240	240	230	...
30	210	210	210	210	220	250	290	250	280	270	290	300	290	280	270	270	270	270	310	340	300	260	220	220	262
31	220	240	220	220	240	250	290	250	270	290	300	310	300	300	290	260	260	270	290	290	270	240	230	200	262
MEAN*	220	226	231	242	251	253	272	248	262	273	282	289	292	293	288	272	256	268	324	352	307	261	234	226	268

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

Table 23. Mean daily noncyclic change, 1939

(A is algebraic excess for hour 23-24 on one day and B for hour 0-1 on the succeeding day as compared with the corresponding hours of the preceding day)

Month	D		H		Z		D		H		Z	
	A	B	A	B	A	B	A	B	A	B	A	B
	′	′	γ	γ	γ	γ	′	′	γ	γ	γ	γ
	All days--75° West MT						Ten selected days--75° West MT					
Jan	0.00	+ 0.01	- 0.6	- 0.5	+ 0.1	+ 0.3	- 0.07	+ 0.02	- 1.2	- 1.8	+ 0.1	+ 1.0
Feb	0.00	0.00	- 2.0	- 1.9	- 0.1	- 0.2	+ 0.05	- 0.15	+ 7.8	+ 7.7	- 0.1	- 0.8
Mar	- 0.02	- 0.04	- 0.1	- 0.2	+ 0.2	+ 0.2	- 0.14	- 0.13	+ 2.4	- 0.2	- 0.4	- 0.3
Apr	- 0.03	+ 0.01	+ 0.5	+ 0.3	- 0.1	0.0	- 0.15	+ 0.16	- 11.0	- 8.9	- 2.0	- 0.8
May	- 0.02	- 0.03	+ 0.9	+ 0.8	+ 0.1	+ 0.1	- 0.18	- 0.09	+ 6.6	+ 3.6	+ 0.3	- 0.1
Jun	0.00	- 0.01	- 0.6	- 0.1	0.0	0.0	- 0.08	- 0.06	- 1.7	+ 4.4	- 0.4	- 0.1
Jul	- 0.03	- 0.02	+ 0.1	+ 0.2	0.0	+ 0.1	- 0.16	- 0.17	+ 6.4	+ 4.5	+ 0.2	+ 0.3
Aug	- 0.01	- 0.01	+ 0.1	- 0.2	- 0.1	- 0.1	- 0.07	- 0.06	+ 2.5	+ 2.5	- 0.8	- 0.6
Sep	+ 0.03	+ 0.01	- 0.8	- 0.5	- 0.1	0.0	+ 0.01	0.00	- 0.4	- 1.7	- 0.2	+ 0.4
Oct	- 0.05	- 0.05	- 0.1	- 0.4	- 0.2	- 0.2	- 0.31	- 0.29	+ 14.5	+ 7.5	- 0.9	- 1.3
Nov	+ 0.02	+ 0.02	+ 0.9	+ 0.5	- 0.2	- 0.3	- 0.07	- 0.11	+ 4.9	+ 5.1	- 0.5	- 0.4
Dec	- 0.03	- 0.01	- 0.2	+ 0.2	+ 0.2	+ 0.2	+ 0.02	+ 0.09	+ 8.9	+ 4.8	+ 0.4	- 0.2
I	0.00	0.00	- 0.5	- 0.4	0.0	0.0	- 0.02	- 0.04	+ 5.1	+ 4.0	0.0	- 0.1
II	- 0.02	- 0.02	- 0.1	- 0.2	0.0	0.0	- 0.15	- 0.06	+ 1.4	- 0.8	- 0.9	- 0.5
III	- 0.02	- 0.02	+ 0.1	+ 0.2	0.0	0.0	- 0.12	- 0.10	+ 3.4	+ 3.8	- 0.2	- 0.1
Year	- 0.01	- 0.01	- 0.2	- 0.2	0.0	0.0	- 0.10	- 0.07	+ 3.3	+ 2.3	- 0.4	- 0.2
	Five quiet days--GMT						Five disturbed days--GMT					
Jan	- 0.02	- 0.30	+ 7.4	+ 6.8	+ 0.6	+ 0.4	- 0.04	+ 0.16	- 12.6	- 8.0	+ 1.4	+ 1.6
Feb	- 0.18	- 0.04	+ 8.4	+ 6.0	+ 0.6	+ 0.8	+ 0.06	+ 0.22	- 54.4	- 47.2	- 2.8	- 1.0
Mar	- 0.34	- 0.28	+ 12.8	+ 9.4	+ 3.6	+ 1.2	+ 0.06	+ 0.10	- 13.4	- 10.0	- 1.6	- 0.8
Apr	- 0.38	- 0.26	+ 12.0	+ 8.8	- 1.8	- 1.0	+ 0.44	+ 0.56	- 28.4	- 17.8	+ 1.2	+ 2.2
May	- 0.12	- 0.08	+ 6.0	+ 5.8	+ 1.0	+ 1.0	+ 0.42	+ 0.60	- 19.0	- 22.4	- 1.2	- 0.6
Jun	- 0.14	- 0.16	+ 1.8	+ 2.0	- 1.2	- 1.0	+ 0.54	+ 0.64	- 11.4	- 14.8	+ 1.2	+ 0.6
Jul	- 0.20	- 0.16	+ 11.6	+ 11.2	+ 0.4	0.0	+ 0.34	+ 0.38	- 23.4	- 23.6	- 0.2	0.0
Aug	- 0.10	- 0.08	+ 3.4	+ 1.8	+ 0.4	+ 0.2	+ 0.64	+ 0.66	- 29.2	- 36.2	- 0.2	- 1.2
Sep	- 0.26	+ 0.06	+ 1.6	+ 3.6	+ 1.4	+ 1.6	+ 0.34	+ 0.04	- 39.6	- 34.4	- 0.8	+ 0.6
Oct	+ 0.18	- 0.04	+ 19.0	+ 14.8	+ 2.6	+ 2.0	+ 0.32	+ 0.22	- 32.0	- 26.2	- 1.4	- 0.6
Nov	- 0.36	- 0.18	+ 5.8	+ 3.2	- 0.6	- 1.2	+ 0.08	0.00	+ 1.4	+ 3.2	0.0	0.0
Dec	+ 0.12	+ 0.06	+ 6.6	+ 5.6	+ 3.0	+ 1.2	+ 0.06	- 0.12	- 1.8	- 3.2	0.0	- 1.2
I	- 0.11	- 0.12	+ 7.0	+ 5.4	+ 0.9	+ 0.3	+ 0.04	+ 0.06	- 16.8	- 13.8	- 0.4	- 0.2
II	- 0.20	- 0.13	+ 11.4	+ 9.2	+ 1.4	+ 1.0	+ 0.29	+ 0.23	- 28.4	- 22.1	- 0.6	+ 0.4
III	- 0.14	- 0.12	+ 5.7	+ 5.2	+ 0.2	0.0	+ 0.48	+ 0.57	- 20.8	- 24.2	- 0.1	- 0.3
Year	- 0.15	- 0.12	+ 8.0	+ 6.6	+ 0.8	+ 0.4	+ 0.27	+ 0.29	- 22.0	- 20.0	- 0.4	0.0

Table 24. Mean daily noncyclic change, 1940

(A is algebraic excess for hour 23-24 on one day and B for hour 0-1 on the succeeding day as compared with the corresponding hours of the preceding day)

Month	D		H		Z		D		H		Z	
	A	B	A	B	A	B	A	B	A	B	A	B
	′	′	γ	γ	γ	γ	′	′	γ	γ	γ	γ
	All days--75° West MT						Ten selected days--75° West MT					
Jan	+ 0.02	0.00	- 0.8	- 0.9	0.0	- 0.1	- 0.06	- 0.12	+ 0.6	+ 0.4	- 0.2	- 0.4
Feb	- 0.05	- 0.06	+ 0.6	+ 0.9	- 0.2	- 0.1	- 0.02	- 0.08	- 0.8	+ 0.3	0.0	+ 0.1
Mar	+ 0.02	+ 0.04	- 4.5	- 4.2	- 0.1	0.0	- 0.10	- 0.08	+ 1.3	+ 1.1	0.0	0.0
Apr	- 0.03	- 0.03	+ 3.4	+ 2.9	+ 0.4	+ 0.3	- 0.55	- 0.14	- 6.0	- 7.0	- 1.9	- 0.9
May	- 0.02	- 0.03	+ 0.9	+ 0.8	0.0	0.0	- 0.02	- 0.08	+ 0.5	- 1.3	- 0.3	- 0.5
Jun	- 0.01	- 0.01	- 1.0	- 1.0	0.0	+ 0.1	- 0.12	- 0.17	+ 4.8	+ 4.3	- 0.7	- 0.5
Jul	- 0.02	- 0.01	+ 0.3	+ 0.5	- 0.1	- 0.1	- 0.10	- 0.11	+ 6.0	+ 3.5	0.0	+ 0.1
Aug	- 0.02	- 0.02	- 0.2	- 0.6	- 0.2	- 0.2	- 0.02	- 0.09	+ 7.7	+ 7.1	+ 0.1	0.0
Sep	- 0.04	- 0.03	- 0.6	- 0.9	+ 0.1	0.0	- 0.18	- 0.12	+ 2.8	+ 0.6	- 0.5	- 0.1
Oct	+ 0.01	- 0.01	+ 1.0	+ 1.5	0.0	0.0	- 0.23	- 0.34	+ 7.6	+ 6.8	- 0.5	- 1.2
Nov	- 0.01	0.00	- 0.3	- 0.4	- 0.4	- 0.3	- 0.03	- 0.21	+ 7.2	+ 8.9	- 1.1	- 1.1
Dec	0.00	- 0.02	- 0.4	+ 0.2	- 0.1	0.0	+ 0.10	0.00	+ 5.1	+ 3.0	+ 0.5	- 0.5
I	- 0.01	- 0.02	- 0.2	0.0	- 0.2	- 0.1	0.00	- 0.10	+ 3.0	+ 3.2	- 0.2	- 0.5
II	- 0.01	- 0.01	- 0.2	- 0.2	+ 0.1	+ 0.1	- 0.26	- 0.17	+ 1.4	+ 0.4	- 0.7	- 0.6
III	- 0.02	- 0.02	0.0	- 0.1	- 0.1	0.0	- 0.06	- 0.11	+ 4.8	+ 3.4	- 0.2	- 0.2
Year	- 0.01	- 0.02	- 0.1	- 0.1	0.0	0.0	- 0.11	- 0.13	+ 3.1	+ 2.3	- 0.4	- 0.4
	Five quiet days--GMT						Five disturbed days--GMT					
Jan	+ 0.02	- 0.02	+ 2.4	+ 2.0	- 2.2	- 1.6	+ 0.24	+ 0.40	- 38.4	- 47.4	- 2.0	- 2.6
Feb	- 0.14	+ 0.12	+ 5.2	+ 1.2	- 1.4	- 0.8	+ 0.12	+ 0.10	+17.2	+19.6	+ 1.8	+ 0.8
Mar	- 0.26	- 0.24	+ 7.0	+ 6.2	0.0	- 0.4	- 0.44	- 0.04	- 29.0	- 43.6	- 2.6	- 2.2
Apr	- 0.10	- 0.18	+ 4.8	+ 3.0	- 1.4	- 1.0	- 0.08	- 0.16	- 2.2	- 3.8	+ 0.8	+ 1.2
May	- 0.22	- 0.14	+ 8.0	+ 6.6	0.0	+ 0.2	+ 0.42	+ 0.22	- 26.8	- 24.8	+ 0.2	- 1.0
Jun	- 0.24	- 0.14	+ 7.4	+ 9.4	0.0	0.0	+ 0.40	+ 0.40	- 18.6	- 11.2	+ 0.6	+ 0.4
Jul	- 0.24	- 0.24	+ 7.8	+ 5.8	+ 0.8	- 0.2	+ 0.14	- 0.04	- 3.8	+ 3.6	- 0.2	- 1.4
Aug	- 0.18	- 0.20	+ 7.2	+ 8.4	- 0.4	+ 1.0	+ 0.46	+ 0.38	- 40.2	- 29.4	+ 2.4	+ 3.2
Sep	- 0.40	- 0.02	+13.4	+11.4	+ 0.8	+ 1.0	+ 0.08	+ 0.18	- 10.6	- 5.4	+ 1.2	+ 0.6
Oct	- 0.12	- 0.22	+ 4.8	+ 7.6	- 0.2	- 0.6	+ 0.34	+ 0.20	- 19.2	- 11.0	+ 2.8	+ 2.0
Nov	- 0.24	- 0.28	+10.8	+12.0	- 0.4	0.0	+ 0.56	+ 0.26	- 21.6	- 18.2	- 1.0	- 0.2
Dec	- 0.06	+ 0.02	+ 6.8	+ 6.6	- 1.4	- 1.0	+ 0.08	- 0.02	- 3.2	- 4.6	+ 1.2	+ 1.6
I	- 0.10	- 0.04	+ 6.3	+ 5.4	- 1.4	- 0.8	+ 0.25	+ 0.18	- 11.5	- 12.6	0.0	- 0.1
II	- 0.22	- 0.16	+ 7.5	+ 7.0	- 0.2	- 0.2	- 0.02	+ 0.04	- 15.2	- 16.0	+ 0.6	+ 0.4
III	- 0.22	- 0.18	+ 7.6	+ 7.6	+ 0.1	+ 0.2	+ 0.36	+ 0.24	- 22.4	- 15.4	+ 0.8	+ 0.3
Year	- 0.18	- 0.13	+ 7.1	+ 6.7	- 0.5	- 0.3	+ 0.19	+ 0.16	- 16.4	- 14.7	+ 0.4	+ 0.2

TABLE 23

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.7	6.9	5.6	4.9	4.5	4.7	5.6	7.9	9.4	10.2	10.3	9.9	9.9	10.1	10.3	10.4	10.3	10.1	9.3	8.9	8.8	8.8	7.7	8.6	8.3
2	8.4	7.1	6.0	5.5	5.3	5.2	5.3	8.1	10.0	10.6	10.8	10.0	9.3	9.7	10.7	9.7	9.2	8.7	9.0	8.4	7.8	8.2	7.5	7.5	8.3
3	6.4	6.1	6.1	4.7	4.4	4.3	5.3	7.9	9.8	10.9	10.7	10.4	10.3	9.9	10.2	9.8	9.0	8.6	7.0	7.6	7.6	7.7	7.2	6.6	7.9
4	7.2	8.5	8.4	6.4	5.9	3.5	4.3	8.0	9.9	10.1	9.9	10.0	9.5	9.5	9.8	9.7	9.3	8.4	8.0	6.9	7.1	7.5	6.0	6.8	7.9
5	7.0	7.1	6.3	6.3	5.2	4.9	5.0	7.3	9.8	10.5	11.0	10.2	10.2	10.0	10.0	10.3	10.6	10.3	9.5	9.0	8.8	8.5	7.6	7.1	8.4
6	7.6	7.3	6.5	5.2	4.4	4.1	5.0	7.3	9.5	10.0	9.8	10.7	11.6	11.4	11.3	10.7	9.8	9.7	9.3	8.2	8.3	8.4	8.7	8.5	8.5
7	8.2	8.0	7.4	7.3	7.0	6.2	6.1	8.4	10.0	10.3	9.5	9.9	10.1	10.7	9.8	10.3	10.3	10.0	9.3	8.4	9.2	8.8	8.2	9.0	8.8
8	8.3	6.6	6.8	6.4	6.1	5.4	5.1	7.2	9.3	10.0	10.3	9.4	9.2	8.8	8.4	8.4	9.0	8.8	8.1	7.5	8.0	7.9	8.4	8.8	8.0
9	7.2	5.3	5.2	5.2	4.7	4.7	4.9	6.4	8.4	9.0	9.5	9.7	9.6	10.0	9.4	10.0	10.0	9.3	8.6	7.3	7.6	6.7	8.3	8.3	7.7
10	9.0	8.3	6.7	4.7	4.2	3.3	4.0	6.8	9.2	9.7	9.3	8.6	9.2	8.9	9.2	9.7	10.0	10.5	10.1	9.2	8.6	8.0	8.4	8.4	8.1
11	8.3	7.6	8.2	7.8	6.7	6.5	6.3	6.0	7.7	8.2	8.2	9.1	9.2	9.5	9.5	9.6	10.0	9.4	9.0	8.5	7.2	6.5	6.6	7.2	8.0
12	7.3	7.3	7.5	6.5	5.0	4.2	4.6	7.3	8.8	9.0	9.1	9.0	9.5	10.1	9.5	9.1	9.5	9.8	10.3	9.0	8.5	8.1	9.0	9.3	8.2
13	8.4	8.4	7.9	7.1	4.8	4.2	4.8	7.2	8.4	8.4	8.5	8.5	8.7	8.9	9.1	9.4	8.7	8.3	7.9	7.4	7.4	6.8	6.9	7.2	7.6
14	6.9	6.5	5.5	4.0	2.6	1.6	3.7	7.5	9.1	9.9	9.5	9.0	8.9	9.2	9.7	9.7	10.5	10.2	9.5	9.2	9.4	9.2	8.0	7.1	7.8
15	7.2	6.7	5.7	4.5	3.2	2.8	3.9	6.5	8.2	8.5	8.5	8.7	8.8	8.3	8.0	8.3	8.2	8.4	8.7	8.4	8.6	7.9	7.9	7.6	7.2
16	6.2	6.3	5.8	4.0	3.0	2.5	4.2	7.1	8.4	8.8	8.9	9.8	9.8	10.5	10.5	10.0	10.0	9.1	8.6	8.1	8.4	7.1	8.0	7.4	7.6
17	6.9	7.3	6.3	3.9	3.7	3.2	4.1	7.1	8.6	8.8	8.7	9.0	8.8	9.1	8.6	9.2	9.3	9.0	9.0	8.1	7.8	5.3	5.2	6.0	7.2
18	7.0	6.8	6.6	5.6	3.9	3.2	4.1	7.0	9.1	9.0	9.5	9.5	9.4	9.2	9.7	9.7	10.3	9.7	8.8	8.8	7.6	9.3	7.3	7.3	7.8
19	6.9	6.5	6.4	5.3	3.9	3.1	4.1	7.0	9.3	9.7	9.6	9.9	9.0	9.4	9.4	9.7	10.0	9.4	8.5	8.8	8.8	8.9	9.2	9.6	8.0
20	6.3	5.2	4.7	4.1	4.0	3.8	4.3	6.7	9.0	9.6	9.3	9.0	9.3	9.3	9.2	9.2	9.3	9.1	8.2	7.1	7.0	7.6	7.5	8.3	7.4
21	7.8	8.5	8.3	7.3	6.7	6.2	6.5	8.4	9.7	10.6	12.0	11.6	11.4	10.3	10.8	11.2	10.3	9.5	8.8	8.8	8.6	8.4	8.0	7.3	9.0
22	6.9	6.8	5.9	5.2	5.2	4.9	5.3	6.6	7.9	8.0	7.9	8.4	8.4	8.3	8.8	9.1	9.4	10.3	8.9	8.3	7.9	8.5	8.2	7.8	7.6
23	7.6	8.0	7.5	6.4	5.4	5.2	4.4	6.9	7.7	7.8	8.5	7.4	7.8	7.8	7.6	8.2	8.6	8.4	7.8	7.0	7.1	7.4	7.8	7.3	7.3
24	6.7	5.7	6.0	5.3	4.9	3.3	3.8	6.3	8.1	8.6	8.6	8.5	8.8	8.7	8.4	8.8	8.9	9.3	8.5	7.2	8.3	9.3	6.4	6.8	7.3
25	6.1	6.5	6.4	5.1	5.2	4.0	4.2	7.2	8.6	8.9	8.9	9.2	8.9	8.9	8.9	8.7	8.2	8.9	8.8	6.0	9.1	9.1	7.9	6.9	7.6
26	6.4	6.0	5.6	4.8	4.4	4.1	4.4	6.2	8.3	9.0	8.2	8.4	8.4	8.9	8.9	8.9	9.5	9.2	8.4	8.2	8.2	8.1	7.5	7.0	7.4
27	6.5	5.8	5.6	4.9	4.2	3.7	4.0	6.7	8.7	9.4	9.5	8.8	8.8	9.0	9.5	9.9	9.5	9.3	8.7	8.0	8.3	8.7	8.0	8.2	7.7
28	...	...	...	...	...	...	...	...	...	8.2	8.0	8.0	8.0	8.6	8.6	8.3	8.7	8.8	8.9	8.2	8.8	7.7	7.2	7.0	...
29	7.3	5.6	5.0	3.4	3.1	3.5	4.5	7.3	8.8	9.1	8.8	8.7	8.5	8.3	9.2	9.5	9.5	10.6	10.1	9.2	8.8	9.3	8.6	8.4	7.7
30	7.9	7.3	7.4	6.2	3.9	3.2	3.9	7.1	9.2	9.4	9.5	9.4	8.9	8.9	8.6	8.7	8.6	8.8	9.2	8.6	8.7	9.2	8.4	7.0	7.8
31																									
* MEAN	7.3	6.9	6.5	5.4	4.7	4.1	4.7	7.2	8.9	9.4	9.4	9.3	9.3	9.3	9.4	9.5	9.5	9.3	8.9	8.2	8.2	8.1	7.7	7.7	7.9

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 24

JUNE 1938 | JUNE 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	210	230	240	240	250	280	250	280	280	270	300	300	290	300	270	250	260	300	320	290	250	240	230	265
2	220	220	230	250	240	230	250	250	270	280	300	300	280	290	290	290	280	260	300	320	280	240	230	210	263
3	220	240	220	240	240	240	280	250	270	280	290	300	300	300	300	280	280	270	320	320	280	250	250	250	270
4	240	230	220	220	210	220	280	250	260	280	280	310	300	310	300	300	280	260	330	380	340	290	260	220	274
5	220	220	210	250	250	250	280	250	250	270	280	290	290	310	300	290	260	260	310	340	300	250	230	210	265
6	220	230	230	220	220	250	250	250	260	280	300	300	310	280	270	270	260	260	320	330	300	260	250	240	265
7	230	230	240	240	220	230	280	250	270	290	290	310	330	310	300	260	280	260	300	310	280	270	220	240	268
8	230	280	330	300	250	300	300	250	280	300	300	300	310	330	350	470	360	270	330	360	300	250	240	220	300
9	210	240	230	220	230	250	300	250	280	300	350	300	300	300	320	330	300	260	310	350	330	260	240	230	279
10	220	220	220	210	210	240	300	250	280	300	310	320	330	340	330	320	290	270	280	300	300	290	260	230	276
11	230	250	250	250	250	240	310	260	300	280	320	330	300	300	320	300	280	250	280	280	300	310	290	250	280
12	240	250	240	240	240	230	270	250	250	300	300	290	310	310	300	260	240	260	280	300	290	260	250	230	266
13	230	250	250	210	230	240	290	260	250	290	330	320	300	320	330	350	280	250	310	380	360	330	240	250	285
14	220	230	220	220	250	270	290	250	260	310	300	310	330	380	330	300	250	250	280	290	260	240	240	220	271
15	220	210	210	220	240	260	300	250	290	310	320	350	350	320	400	340	300	280	280	320	260	260	230	240	282
16	220	210	210	220	250	270	290	260	300	310	330	330	320	300	350	300	280	260	310	310	250	250	220	230	274
17	220	230	210	230	250	250	290	250	290	300	320	320	340	360	330	310	300	250	290	330	350	330	270	250	286
18	230	210	210	210	220	260	290	250	280	310	330	325	340	350	380	380	280	250	290	300	280	240	240	240	279
19	230	230	210	230	220	240	260	250	280	290	360	380	300	350	280	330	270	250	290	300	260	230	220	200	269
20	200	210	220	240	260	270	290	240	280	300	340	350	350	320	370	310	300	260	290	330	300	240	230	210	280
21	230	220	220	280	300	270	270	240	270	290	320	320	350	300	290	300	280	260	310	340	300	250	220	220	277
22	230	220	230	280	300	270	300	250	280	290	300	300	320	340	310	310	270	250	280	290	290	270	250	240	278
23	230	225	220	230	230	220	270	250	270	300	410	310	400	400	300	300	280	250	300	340	290	240	210	200	278
24	210	230	230	230	230	240	290	240	275	310	320	330	360	320	300	290	270	250	300	300	290	250	210	230	271
25	240	230	230	230	220	220	270	240	270	280	300	370	300	330	330	290	270	240	270	260	260	230	210	220	263
26	210	230	230	230	230	270	300	250	280	300	320	340	300	360	330	350	300	240	300	300	290	230	230	220	277
27	220	230	210	220	230	220	290	240	270	300	300	310	350	300	350	290	280	200	300	300	250	220	210	220	263
28	...c	...c	...c	...c	...c	...c	...c	...c	...c	310	340	340	330	320	350	300	280	250	270	250	240	210	230	220	...
29	210	200	210	250	260	280	260	240	280	300	300	310	410	330	370	290	240	250	260	270	280	250	210	230	270
30	220	240	240	210	230	240	280	250	280	280	...b	320	350	350	330	320	320	260	280	290	280	250	210	230	...
31																									
* MEAN	223	229	228	235	240	249	283	249	274	294	315	320	325	324	324	310	280	255	296	314	289	257	235	228	274

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 25

JUNE 1938 JUNE 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	5.2	5.2	5.2	5.5	5.4	5.4	5.3	4.8	...	...	...
2	...	...	4.9	5.4	5.5	5.4	5.4	5.4	5.2	4.9	4.3	...	...
3	...	...	5.4	5.5	5.5	5.6	5.6	5.6	5.2	5.3	4.6	...	...
4	...	...	4.7	5.2	5.5	5.6	5.6	5.5	5.4	5.2	4.3	...	...
5	...	...	4.2	5.2	5.3	5.5	5.5	5.4	5.4	5.0	4.3	...	...
6	...	...	4.6	5.4	5.5	5.5	5.5	5.2	5.0	4.7	4.3	...	...
7	...	...	5.1	5.4	5.3	5.6	5.6	5.5	5.2	4.6	4.4	...	...
8	...	...	4.7	5.5	5.3	5.4	5.6	5.4	5.5	5.7	5.1	...	...
9	...	...	4.6	5.2	5.7	5.6	5.6	5.5	5.5	5.4	5.0	...	...
10	...	...	4.8	5.3	5.5	5.5	5.5	5.5	5.3	5.2	4.8	...	...
11	...	...	5.2	5.6	5.5	5.6	5.4	5.5	5.4	5.0	4.3	...	...
12	...	...	...	5.0	5.3	5.4	5.4	5.4	5.3	4.4	...	...	...
13	...	...	...	5.2	5.5	5.5	5.5	5.5	5.6	5.4	3.9	...	...
14	...	...	4.3	5.5	5.5	5.5	5.4	5.7	5.3	5.3	...	...	...
15	...	...	5.2	5.4	5.6	5.4	5.5	5.3	5.5	5.4	5.1	...	...
16	...	...	5.2	5.3	5.6	5.5	5.4	5.3	5.6	4.9	4.6	...	...
17	...	...	4.9	5.4	5.5	5.4	5.5	5.6	5.5	5.0	4.8	...	...
18	...	...	5.0	5.3	5.4	5.5	5.5	5.5	5.6	5.5	4.2	...	...
19	...	...	5.0	5.3	5.5	5.4	5.4	5.3	4.8	4.8	4.6	...	...
20	...	...	4.8	5.4	5.5	5.5	5.5	5.5	5.5	5.1	4.5	...	...
21	...	...	5.3	5.2	5.3	5.3	5.5	5.4	5.1	4.9	4.3	...	...
22	...	...	4.5	5.0	5.0	5.3	5.3	5.5	5.2	5.0	4.1	...	...
23	...	...	4.5	5.0	5.5	5.1	5.5	5.5	4.9	4.5	4.4	...	...
24	...	...	4.5	5.1	5.2	5.4	5.5	5.2	5.1	4.9	4.4	...	...
25	...	...	4.8	5.3	5.3	5.6	5.2	5.4	5.5	5.1	4.3	...	...
26	...	...	4.8	5.2	5.5	5.6	5.5	5.4	5.3	5.5	5.0	...	...
27	...	...	5.0	5.3	5.5	5.4	5.6	5.4	5.5	5.0	4.8	...	...
28	...	...	...	5.3	5.5	5.5	5.2	5.2	5.5	5.0	4.5	...	...
29	...	...	5.0	5.3	5.4	5.3	5.2	5.5	5.5	5.0	...	...	...
30	...	...	4.8	5.2	...b	5.5	5.3	5.5	5.3	5.3	5.2	...	...
31													
MEAN*	...	...	4.8	5.3	5.4	5.5	5.4	5.4	5.3	5.1	4.5	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	210	200	200	200	220	230	...	...	...
2	...	...	230	220	220	220	210	210	210	220	250	...	...
3	...	...	230	220	210	210	220	220	210	220	230	...	...
4	...	...	240	210	200	200	220	220	210	210	240	...	...
5	...	...	240	210	210	210	220	200	200	230	230	...	...
6	...	...	240	210	210	220	220	200	210	230	240	...	...
7	...	...	230	220	210	210	200	200	210	220	240	...	...
8	...	...	240	230	q250b	220	240	230	230	210	240	...	...
9	...	...	220	220	240	230	220	230	210	230	230	...	...
10	...	...	240	230	220	230	210	230	250	230	240	...	...
11	...	...	240	230	240	230	230	220	200	220	220	...	...
12	...	...	...	230	220	210	220	200	210	210	...	...	...
13	...	...	...	230	220	210	220	210	200	240	240	...	...
14	...	...	230	220	220	200	200	200	200	240	...	...	...
15	...	...	230	220	210	210	220	200	230	200	220	...	...
16	...	...	230	230	220	200	230	200	220	220	230	...	...
17	...	...	230	220	210	200	200	200	210	210	210	...	...
18	...	...	230	210	210	200	200	200	200	200	220	...	...
19	...	...	210	210	200	200	210	200	200	200	220	...	...
20	...	...	220	210	210	200	200	200	200	210	210	...	...
21	...	...	220	220	220	210	200	200	200	200	220	...	...
22	...	...	230	210	210	200	200	210	200	220	230	...	...
23	...	...	220	210	200	200	190	200	200	200	200	...	...
24	...	...	210	210	200	200	180	190	190	200	220	...	...
25	...	...	220	210	200	190	190	180	180	190	200	...	...
26	...	...	220	210	210	200	200	200	200	200	230	...	...
27	...	...	220	220	200	190	200	200	200	210	210	...	...
28	...	...	...	220	210	200	200	200	190	200	230	...	...
29	...	...	210	200	...b	200	200	190	200	220	...	...	...
30	...	...	230	220	...b	210	200	200	190	200	200	...	...
31													
MEAN*	...	...	227	218	213	207	208	205	206	214	225	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1938

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	1.2	2.8	2.8	2.8	3.1	3.4	3.6	3.5	2.8	2.8	1.5	1.2	1.6	2.7	3.5	3.8	4.0	4.1	4.1	4.1	4.1	3.8	3.5	2.8	1.2
2	1.2	1.8	2.8	2.7	2.8	2.8	2.8	2.8	2.8	2.2	1.5	1.3	1.0	1.5	2.8	3.7	3.8	4.0	4.4	4.3	4.1	3.8	3.7	3.3	2.2	1.0
3	1.1	1.3	1.7	2.8	3.5	3.5	3.4	2.8	2.8	1.9	1.3	1.0	1.0	1.6	2.8	3.6	3.8	4.0	4.0	4.1	4.3	3.6	3.5	3.0	2.1	1.0
4	1.3	1.0	2.7	2.8	3.4	3.4	3.5	3.4	3.4	2.7	1.7	1.1	1.0	1.5	2.8	3.6	3.9	4.1	4.1	4.2	4.1	4.0	3.6	3.2	2.2	1.0
5	0.9	1.4	1.8	2.8	3.3	3.8	3.8	3.3	2.7	2.8	1.8	1.3	1.1	1.4	2.7	3.6	3.8	3.9	4.2	4.3	4.1	4.0	3.8	3.0	2.3	1.1
6	0.9	0.9	1.7	2.8	2.8	q4.5	3.5	3.6	3.3	2.8	2.8	1.2	0.8	1.5	2.8	3.5	3.8	4.1	q4.5	4.6	4.1	4.0	3.9	3.4	2.8	1.2
7	1.2	1.4	1.8	2.8	2.8	2.8	2.8	3.0	2.8	1.8	1.4	1.2	1.1	1.4	2.8	3.3	3.8	3.9	4.1	4.1	4.1	3.8	3.6	3.0	2.2	1.1
8	0.9	1.8	1.8	1.8	q4.5	2.8	3.7	2.8	2.8	2.7	2.7	1.0	1.0	1.4	2.8	3.5	3.8	...b	4.4	4.3	4.4	3.9	3.5	3.0	2.2	1.0
9	0.9	1.2	1.6	2.1	2.7	2.7	2.8	2.7	2.7	1.8	1.2	1.2	1.0	1.5	2.3	3.0	3.6	3.8	4.3	4.4	4.0	3.9	3.5	2.9	2.2	1.0
10	0.9	1.3	1.5	1.8	2.8	3.5	3.5	3.4	3.1	2.8	1.4	1.2	1.4	1.3	2.8	3.0	3.7	4.0	4.2	4.3	4.5	4.4	3.8	3.0	2.2	1.1
11	1.2	1.2	1.5	1.8	2.8	2.8	2.8	2.8	2.7	1.8	1.2	1.2	0.9	1.2	1.2	1.5	3.8	4.0	4.3	4.2	4.1	4.0	3.6	3.0	2.1	1.1
12	1.4	1.7	1.8	1.9	2.8	2.6	2.8	2.8	2.7	1.7	1.5	1.2	0.8	1.4	2.6	3.5	4.0	4.1	4.2	4.3	4.2	3.9	3.6	3.0	2.4	1.1
13	1.3	1.3	1.7	2.8	2.7	2.8	2.8	2.8	2.7	1.7	1.4	1.4	1.2	1.3	2.8	3.4	4.0	4.0	4.1	4.2	4.0	3.1	3.5	3.1	2.2	1.2
14	0.9	1.0	1.4	1.8	2.8	2.8	2.8	2.8	2.8	1.6	1.4	1.2	0.6	1.4	2.4	3.1	3.6	3.9	4.1	4.1	4.3	4.0	3.8	3.1	2.5	1.2
15	0.9	1.1	1.4	1.8	2.3	2.7	2.7	2.8	2.8	1.4	1.2	1.4	1.1	1.5	2.6	3.2	3.7	3.8	4.1	4.0	3.9	3.9	3.6	2.9	2.6	1.1
16	0.9	1.0	1.7	2.8	2.8	2.8	2.7	2.8	2.8	1.8	1.2	0.9	1.2	1.4	2.8	3.1	3.7	4.1	4.5	4.6	4.1	3.9	3.6	3.0	2.2	1.2
17	0.5	1.0	1.8	2.7	2.8	3.0	2.8	3.7	2.2	1.6	1.6	...c	...c	1.4	2.8	3.3	3.8	3.7	4.0	4.0	4.0	3.8	3.2	2.8	2.3	...c
18	0.8	0.8	0.9	1.7	1.7	2.1	2.1	1.8	1.7	1.6	0.8	0.8	0.8	1.2	2.4	3.0	3.4	3.8	4.1	4.1	3.0	3.0	3.2	2.8	2.1	0.8
19	0.8	0.8	0.8	0.9	1.6	2.4	2.4	2.1	1.7	1.6	1.6	0.9	0.8	1.3	2.3	3.0	3.3	3.5	4.1	4.2	3.8	3.5	3.3	2.8	2.2	0.9
20	0.8	0.8	0.9	1.6	1.6	1.8	2.2	1.7	1.7	1.2	0.8	0.8	0.9	1.2	2.3	2.8	3.3	3.6	4.1	4.2	3.9	3.6	3.2	2.8	2.2	0.9
21	0.8	0.8	0.9	1.7	2.0	2.2	2.6	1.7	1.7	1.7	1.2	0.8	0.8	1.2	2.4	2.9	3.4	4.1	4.2	4.2	4.1	3.5	3.4	2.8	2.2	1.1
22	0.8	0.8	0.9	1.7	1.7	2.4	2.6	2.2	2.0	1.6	0.9	0.9	0.8	1.3	2.4	3.0	3.3	3.6	4.2	4.3	4.2	3.5	3.3	2.9	2.2	0.8
23	0.8	0.9	0.9	1.6	2.0	1.3	1.2	1.2	1.2	1.1	1.0	0.9	0.5	1.3	2.1	3.0	3.3	3.7	3.8	3.8	3.7	3.5	3.2	2.8	2.1	1.2
24	0.5	0.7	1.1	1.2	1.2	1.7	1.7	1.7	1.2	1.2	1.2	0.8	0.5	1.2	2.3	2.9	3.3	3.6	3.8	3.7	3.7	3.6	3.2	2.7	2.3	1.1
25	0.8	0.8	1.2	1.3	1.2	1.2	1.4	1.3	1.2	1.1	0.9	0.7	0.6	1.3	2.3	3.0	3.4	3.5	3.8	3.7	3.7	3.5	3.1	2.9	2.1	1.0
26	0.5	0.7	1.0	1.2	1.2	1.9	1.8	1.8	1.8	1.2	1.0	0.7	0.5	1.4	2.4	3.0	3.4	3.6	3.8	3.9	3.8	3.6	3.1	2.9	2.3	1.2
27	0.6	0.5	0.9	1.2	1.3	1.7	1.8	1.7	1.4	1.2	0.8	0.8	0.5	1.2	2.4	3.0	3.4	3.7	3.7	3.9	3.8	3.6	3.3	2.8	2.2	1.2
28	...	...	...	1.5	1.2	1.7	1.4	1.4	1.2	1.2	0.9	0.7	0.8	...	...	...	3.3	3.6	3.7	3.7	3.6	3.6	3.4	2.9	1.7	0.9
29	0.8	0.8	1.2	1.2	...	1.9	1.8	1.8	1.7	1.8	1.8	1.0	0.8	1.3	2.4	3.0	3.4	...b	3.8	3.9	3.7	3.6	3.4	3.1	2.2	1.0
30	0.7	0.8	1.2	1.2	...	1.8	1.8	1.9	1.4	1.3	1.4	0.8	0.6	1.2	2.4	3.0	3.3	...b	3.8	3.9	3.8	3.5	3.3	3.0	2.2	1.0
31																										
* MEAN	0.9	1.1	1.5	2.0	2.3	2.5	2.6	2.5	2.3	1.8	1.4	1.0	0.9	1.4	2.5	3.1	3.6	3.8	4.1	4.1	4.0	3.7	3.5	3.0	2.2	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 27

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1938 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JULY 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.4	7.2	8.0	7.0	5.4	3.7	4.1	7.7	9.5	10.0	9.8	9.6	9.1	9.2	9.2	9.2	9.5	9.2	8.6	8.4	9.2	9.9	8.4	7.4	8.2
2	7.3	7.2	7.2	7.2	6.5	5.6	5.6	8.0	9.7	10.6	10.0	9.3	9.0	8.8	9.2	9.2	9.6	9.5	8.9	8.2	8.4	8.1	8.3	8.6	8.3
3	9.0	7.0	7.4	6.8	5.9	5.0	4.9	8.2	9.9	9.5	9.5	8.8	8.5	8.5	8.6	9.0	9.6	9.1	8.7	7.6	7.3	6.9	6.9	7.1	7.8
4	7.7	8.4	7.4	7.1	6.4	6.2	6.3	8.5	10.1	10.2	10.8	11.0	10.5	9.0	9.4	8.8	9.2	9.5	10.2	9.6	9.2	8.9	8.7	10.0	8.9
5	9.6	9.6	8.9	8.7	6.4	4.6	4.4	6.8	8.9	9.4	9.8	9.5	9.5	9.3	9.6	8.7	8.8	8.4	7.8	7.5	7.8	7.3	7.3	6.1	8.1
6	6.0	6.3	7.4	6.7	6.2	5.7	5.8	7.2	8.9	9.9	9.7	10.3	9.8	10.1	10.4	10.5	10.4	9.5	9.0	8.3	8.0	8.5	8.5	7.9	8.4
7	7.7	6.9	7.6	6.9	6.0	4.5	4.3	7.3	8.8	9.0	10.0	9.9	9.8	9.5	9.2	8.8	9.0	9.2	8.9	8.3	8.4	8.4	7.5	8.9	8.1
8	8.5	7.5	6.9	5.9	4.9	4.9	5.1	7.2	8.9	10.0	9.8	10.0	9.6	9.5	9.2	9.3	9.5	9.4	9.0	8.8	9.3	9.4	8.7	8.9	8.3
9	7.9	7.9	7.4	7.3	6.6	6.1	5.7	7.2	9.0	9.3	9.2	8.9	9.3	9.2	9.4	9.5	9.3	9.2	9.0	7.7	6.4	6.7	8.3	8.5	8.1
10	8.0	6.3	5.5	5.6	9.9	11.9	10.4	7.3	9.5	10.2	11.2	10.5	10.1	9.3	9.1	9.3	9.3	9.0	9.0	8.4	7.9	11.8	10.5	8.6	9.1
11	8.0	7.7	8.0	7.2	6.5	5.5	4.5	7.5	9.4	9.8	10.9	10.7	9.9	9.5	9.1	8.8	8.6	8.4	8.1	7.5	8.0	8.2	7.9	7.3	8.2
12	8.0	8.1	7.5	5.7	3.7	3.0	4.1	7.8	9.4	10.0	9.6	9.7	8.8	8.7	8.8	8.7	8.8	8.2	7.8	7.2	7.7	8.0	6.5	7.1	7.6
13	7.3	7.5	7.4	6.2	4.6	4.4	4.7	8.0	9.2	9.8	10.3	10.0	9.7	9.7	9.8	9.9	9.6	9.1	8.3	7.0	7.3	7.2	6.7	7.4	8.0
14	8.0	8.1	7.6	6.4	6.1	5.1	5.3	7.0	9.2	10.0	10.0	9.7	10.0	10.0	9.5	9.6	9.5	9.0	8.9	8.1	8.3	8.4	8.8	9.9	8.4
15	8.1	7.6	6.8	5.6	3.6	2.7	4.4	7.3	8.7	9.4	9.9	9.5	9.3	8.8	8.2	8.4	8.8	8.8	9.2	9.0	9.5	9.8	9.1	7.3	7.9
16	7.2	7.3	7.0	6.9	6.4	3.2	4.2	7.5	9.9	10.2	10.7	10.7	10.3	10.6	10.3	10.4	10.4	10.5	9.8	8.4	8.0	8.6	8.8	8.2	8.6
17	9.0	8.4	8.4	8.4	8.3	7.6	7.3	9.1	10.2	10.1	9.9	9.6	9.3	9.2	9.0	8.9	9.6	9.0	8.9	8.1	8.0	7.5	7.9	7.3	8.7
18	6.6	6.4	6.3	5.1	4.8	3.2	3.9	7.1	9.3	10.4	10.4	9.9	9.9	9.9	9.7	10.1	9.3	9.8	9.0	7.9	7.2	6.6	6.1	7.4	7.8
19	8.0	6.6	6.8	6.3	5.4	4.4	4.9	7.6	9.6	10.5	10.1	10.2	9.9	10.3	9.8	9.7	9.3	9.0	8.6	8.2	8.3	8.0	7.7	7.2	8.2
20	7.0	7.1	7.0	6.0	5.6	5.6	6.6	7.1	9.3	9.9	9.9	10.1	10.1	10.0	9.4	8.8	8.3	8.5	7.8	6.6	6.6	7.4	7.5	6.6	7.9
21	6.2	5.6	5.8	5.2	4.5	4.5	5.3	8.0	9.2	9.2	9.0	9.3	9.3	9.9	10.2	10.4	10.7	10.5	9.9	9.7	9.9	9.4	9.0	8.6	8.3
22	8.1	7.8	7.4	6.1	5.4	5.1	5.4	7.8	9.3	9.7	9.9	10.2	10.3	10.3	10.5	10.6	10.2	9.9	8.8	8.1	8.0	8.0	7.9	7.6	8.4
23	7.4	7.8	8.0	7.7	6.3	6.3	5.5	7.4	8.9	9.1	9.1	9.3	9.5	10.3	10.0	10.1	10.4	9.7	9.5	9.0	8.6	8.2	7.9	7.3	8.5
24	7.7	7.2	6.8	5.2	3.8	3.2	4.0	7.0	8.8	9.1	9.2	9.5	9.4	9.3	9.9	9.6	9.8	9.5	9.5	8.2	8.0	8.4	8.3	8.4	7.9
25	9.5	9.0	7.3	6.4	4.5	4.0	4.4	7.2	9.7	9.8	9.2	8.9	8.4	8.9	7.8	8.3	8.3	8.1	8.0	7.3	7.0	7.4	6.6	7.0	7.6
26	6.5	6.4	9.3	4.4	3.8	3.6	4.4	7.3	9.8	10.5	10.5	10.5	10.4	9.8	9.6	10.0	9.7	10.3	10.1	9.4	9.3	9.0	8.2	7.2	8.3
27	7.4	6.8	7.4	5.5	3.7	3.5	4.1	6.9	8.8	10.2	10.7	10.1	10.7	11.5	11.0	11.2	10.5	10.0	9.4	9.0	9.0	9.0	8.0	7.8	8.4
28	7.5	7.2	6.7	6.1	5.1	5.0	4.9	7.2	8.6	9.5	9.7	9.6	9.5	9.7	9.5	9.8	10.5	10.8	10.4	10.0	10.5	9.5	8.9	8.3	8.5
29	8.3	7.9	5.9	4.3	2.7	2.6	3.8	7.3	9.1	9.6	10.5	10.1	10.1	9.7	9.5	9.4	9.3	8.3	8.1	6.7	6.3	6.8	7.1	7.1	7.5
30	7.9	6.9	5.1	4.0	3.2	3.1	4.4	8.6	9.8	11.6	12.1	12.1	11.9	11.8	11.9	10.7	10.0	9.8	10.0	9.2	8.8	9.3	10.0	9.6	8.8
31	9.3	9.4	9.7	7.5	6.5	5.9	4.5	8.2	10.2	10.7	10.4	10.0	9.7	9.4	9.0	9.0	9.0	8.8	8.2	7.4	6.8	6.6	6.5	7.3	8.3
MEAN*	7.7	7.5	7.3	6.5	5.4	4.8	5.1	7.6	9.3	9.9	10.0	9.9	9.7	9.7	9.5	9.5	9.5	9.3	9.0	8.2	8.2	8.3	8.0	7.9	8.2

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 28

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1938 JULY 1938

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	250	230	220	210	220	250	250	260	280	290	330	330	310	300	330	260	250	320	320	260	230	210	210	265
2	230	240	250	280	270	260	260	250	260	280	310	280	310	300	340	320	260	250	300	320	290	240	230	210	272
3	230	230	220	220	230	240	240	240	260	260	330	340	350	340	260	320	310	250	300	360	360	250	240	230	275
4	230	210	230	240	230	240	260	250	280	270	300	320	290	300	300	270	260	250	280	290	260	230	230	220	260
5	240	260	250	230	210	210	250	250	280	280	290	290	300	310	330	340	360	260	310	330	300	260	220	230	275
6	250	230	210	220	210	240	280	250	260	280	300	300	310	300	310	290	290	260	300	300	300	240	230	210	265
7	210	220	220	220	210	210	250	250	270	280	290	290	300	310	300	300	280	260	290	290	250	240	220	210	257
8	210	210	210	230	230	230	250	250	275	290	290	290	300	300	300	300	300	350	290	280	250	230	230	230	264
9	230	230	230	220	230	230	270	250	280	290	310	280	370	300	370	320	310	250	290	360	400	280	240	220	282
10	230	220	260	350	330	320	270	250	270	280	380	350	320	320	300	270	260	270	280	350	400	300	250	230	294
11	250	260	260	260	250	230	290	250	290	280	300	290	310	400	360	430	350	260	300	310	290	250	240	240	290
12	230	230	220	220	240	250	270	250	260	290	300	300	290	340	400	300	280	270	320	360	340	280	230	230	279
13	220	220	220	220	240	240	260	250	260	270	300	350	300	390	380	350	270	260	320	400	330	280	250	250	285
14	230	230	260	260	240	250	300	250	260	280	290	290	300	300	300	330	260	250	310	360	350	260	220	220	275
15	230	230	230	210	220	270	250	260	270	310	300	340	310	400	420	400	250	270	300	280	240	220	230	220	278
16	260	270	270	240	230	230	280	250	270	280	280	280	290	280	300	290	280	250	300	360	310	280	220	230	272
17	210	210	230	250	250	240	260	250	260	270	290	290	280	280	250	290	260	250	300	330	300	240	220	220	260
18	210	210	220	230	210	210	280	240	280	300	280	300	320	320	450	320	280	260	290	380	380	300	260	230	282
19	210	210	220	220	210	230	270	250	270	280	290	290	310	280	310	310	290	250	300	310	280	220	220	210	260
20	220	220	240	270	250	250	280	250	270	290	280	300	300	280	310	300	320	260	300	350	310	260	230	200	272
21	210	210	200	210	230	250	270	250	270	290	300	280	300	280	290	310	280	250	280	300	280	230	220	210	258
22	210	215	210	210	230	250	280	250	270	280	280	300	300	300	290	290	280	260	290	340	330	280	200	210	265
23	220	220	230	230	230	230	260	250	280	300	300	320	320	300	300	300	280	260	300	340	330	290	250	230	274
24	220	210	220	220	240	240	300	250	300	300	290	350	340	300	320	300	200	260	300	350	310	240	240	240	272
25	220	220	210	220	240	240	300	250	280	300	280	350	320	400	330	300	270	250	320	380	230	280	270	250	280
26	220	220	200	230	240	250	290	250	270	280	270	350	390	350	290	300	310	250	290	320	260	250	230	230	272
27	210	220	210	210	220	250	300	250	280	300	280	300	370	400	300	300	260	250	290	300	280	260	240	240	272
28	220	220	220	220	230	250	300	240	290	300	310	320	350	330	330	390	280	250	280	270	240	200	230	230	271
29	210	210	210	220	220	250	300	250	270	280	300	300	350	300	300	320	330	250	320	370	350	260	250	240	278
30	200	200	210	250	280	400	300	250	270	270	300	290	360	280	300	350	320	250	300	300	260	230	230	220	276
31	230	250	230	220	230	220	260	240	260	270	280	280	380	400	310	330	270	250	300	350	340	300	230	210	277
MEAN*	224	225	227	234	235	246	274	249	272	284	296	308	322	323	321	318	284	259	299	331	300	255	233	225	273

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 29

JULY 1938 JULY 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.5	5.3	5.4	5.7	5.5	5.6	5.3	5.5	4.0	...	...
2	...	...	4.5	5.3	5.5	5.4	5.3	5.2	5.5	5.4	4.4	...	...
3	...	...	5.0	5.2	5.4	5.6	5.5	5.4	5.1	5.2	5.0	...	...
4	...	...	4.9	5.1	5.5	5.4	5.4	5.4	5.3	4.8	4.3	...	...
5	...	...	4.8	5.3	5.5	5.5	5.5	5.3	5.3	5.0	5.0	...	...
6	...	...	4.6	5.4	5.5	5.0	5.6	5.5	5.3	5.2	4.9	...	...
7	...	...	4.6	5.1	5.4	5.5	5.3	5.4	5.3	5.2	4.8	...	...
8	...	...	5.0	5.5	5.4	5.5	5.5	5.4	5.3	5.1	4.8	...	...
9	...	...	5.2	5.6	5.6	5.5	5.8	5.5	5.7	5.5	5.3	...	...
10	...	...	4.6	5.5	6.2	6.0	5.6	5.5	5.3	4.2	4.0	...	...
11	...	...	5.3	5.3	5.6	5.6	5.6	4.0	5.4	5.8	5.4	...	...
12	...	...	4.4	5.5	5.5	5.6	5.5	5.5	6.0	5.3	4.2	...	...
13	...	...	4.8	5.1	5.7	6.0	5.6	6.8	5.9	5.5	4.2	...	...
14	...	...	4.5	5.4	5.5	5.6	5.6	5.5	5.5	5.5	4.2	...	...
15	...	...	4.4	5.5	5.5	5.8	5.5	5.7	5.5	5.8	...	...	...
16	...	...	4.9	5.3	5.4	5.4	5.6	5.3	5.5	5.4	4.8	...	...
17	...	...	5.2	5.2	5.5	5.3	5.3	5.4	4.5	5.2	4.2	...	...
18	...	...	5.1	5.4	5.5	5.3	5.3	5.3	6.2	5.6	4.7	...	...
19	...	...	5.1	5.4	5.5	5.5	5.3	5.3	5.3	5.3	5.1	...	...
20	...	...	5.1	5.2	5.4	5.5	5.4	5.3	5.4	5.2	5.1	...	...
21	...	...	5.1	5.3	5.4	5.5	5.4	5.5	5.4	5.5	4.8	...	...
22	...	...	5.0	5.3	5.4	5.5	5.5	5.4	5.2	5.2	4.8	...	...
23	...	...	5.0	5.5	5.6	5.7	5.8	5.5	5.4	5.4	4.8	...	...
24	...	...	5.5	5.5	5.5	6.0	5.8	5.5	5.5	5.4	4.5	...	...
25	...	...	5.0	5.5	5.3	5.8	5.7	6.0	5.5	5.2	4.3	...	...
26	...	...	5.0	5.5	5.3	6.1	6.3	5.8	5.4	5.6	5.4	...	...
27	...	...	5.1	5.1	5.5	5.5	5.2	6.5	5.5	5.5	4.5	...	...
28	...	...	5.4	5.5	5.6	5.6	5.8	5.6	5.6	6.0	5.1	...	...
29	...	...	5.0	5.5	5.5	5.5	6.0	5.7	5.4	5.4	5.4	...	...
30	...	...	4.9	5.2	6.0	5.6	6.4	5.6	5.6	5.8	5.3	...	...
31	...	...	...	5.4	5.5	5.6	6.0	6.0	5.5	5.5	4.6	...	...
MEAN*	...	...	4.9	5.4	5.5	5.5	5.6	5.5	5.4	5.4	4.7	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	210	200	200	200	190	...b	210	230	...	...
2	...	...	230	220	200	200	200	200	190	200	230	...	...
3	...	...	230	200	210	200	210	200	190	200	200	...	...
4	...	...	240	220	210	210	200	200	200	200	220	...	...
5	...	...	240	210	210	200	200	210	220	210	220	...	...
6	...	...	230	220	210	200	200	200	210	210	230	...	...
7	...	...	230	210	200	200	200	200	200	210	230	...	...
8	...	...	230	210	200	200	200	200	200	210	230	...	...
9	...	...	220	200	210	200	200	200	210	210	220	...	...
10	...	...	240	220	210	210	230	210	210	240	240	...	...
11	...	...	240	230	230	210	210	200	210	210	230	...	...
12	...	...	240	220	210	200	200	200	220	200	230	...	...
13	...	...	230	210	210	200	200	200	200	200	230	...	...
14	...	...	230	220	200	200	190	210	210	220	230	...	...
15	...	...	240	230	220	210	220	210	220	230	...	...	...
16	...	...	230	220	210	200	200	200	210	230	230	...	...
17	...	...	230	210	210	200	200	190	190	200	230	...	...
18	...	...	220	210	200	200	200	200	200	210	230	...	...
19	...	...	230	220	210	200	200	200	200	210	220	...	...
20	...	...	230	210	200	200	200	200	200	200	210	...	...
21	...	...	220	200	200	200	200	200	200	200	230	...	...
22	...	...	230	220	210	210	200	200	200	210	220	...	...
23	...	...	230	220	200	200	210	210	200	210	230	...	...
24	...	...	230	220	210	200	210	200	200	200	210	...	...
25	...	...	230	210	200	200	200	220	210	200	230	...	...
26	...	...	230	210	200	200	200	200	200	220	220	...	...
27	...	...	220	210	210	200	200	...b	200	190	210	...	...
28	...	...	240	210	200	200	180	190	200	200	220	...	...
29	...	...	230	220	210	200	200	200	200	210	220	...	...
30	...	...	230	220	200	200	210	200	210	220	230	...	...
31	...	...	...	210	210	200	200	200	200	200	220	...	...
MEAN*	...	...	231	215	207	202	202	201	204	209	224	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 30

JULY 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1938

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.8	1.2	1.8	1.8	3.0	1.8	1.5	p4.5	1.2	1.0	0.7	0.6
2	0.8	0.8	1.0	1.4	1.2	1.8	1.5	1.4	1.3	1.2	1.0	0.6	0.5
3	0.7	0.8	0.9	1.1	1.8	1.8	1.8	1.7	1.3	1.2	0.9	0.8	0.5
4	0.5	1.1	1.2	2.7	2.7	2.7	2.8	1.8	1.8	1.4	1.2	0.9	0.5
5	0.6	0.8	1.2	1.8	1.8	1.9	2.8	2.1	2.8	1.4	1.2	1.0	0.8
6	0.8	0.8	1.3	2.1	2.2	2.7	2.7	2.7	2.9	1.8	1.2	0.8	0.5
7	0.8	0.9	1.2	1.7	2.0	1.9	1.9	1.7	1.7	1.2	0.9	0.5	0.5
8	0.8	0.9	1.1	1.2	1.7	2.0	1.8	1.7	1.8	1.3	0.9	0.7	0.5
9	0.5	0.5	0.8	1.9	1.7	1.8	1.8	1.8	1.4	1.2	1.1	0.8	0.5
10	0.5	0.8	1.2	1.4	2.8	2.8	3.7	2.8	1.8	1.4	1.5	0.9	0.6
11	0.5	0.8	1.7	1.9	2.1	3.1	3.0	3.1	1.8	1.3	1.1	0.6	0.8
12	0.9	0.9	1.2	1.4	1.8	1.8	2.8	1.9	1.9	1.3	1.2	0.8	0.6
13	0.5	0.8	1.2	1.2	3.0	1.8	2.7	3.3	1.8	1.8	1.2	0.8	0.5
14	0.5	0.6	1.0	1.8	1.7	2.1	1.7	2.1	1.8	1.7	1.2	0.5	0.5
15	0.9	0.9	1.0	2.8	1.2	2.6	1.9	2.0	1.8	1.4	0.8	0.6	0.8
16	0.5	0.6	0.9	1.2	1.8	2.8	1.9	1.7	1.7	2.7	1.2	0.8	0.8
17	0.5	0.8	0.9	1.2	1.7	1.8	2.7	1.7	1.8	1.2	0.9	0.7	0.6
18	0.8	0.8	1.1	1.2	2.7	2.7	2.7	3.5	2.7	1.7	0.9	0.5	0.5
19	0.8	0.9	2.0	1.7	1.7	2.1	2.7	2.0	1.8	1.7	1.5	0.9	0.6
20	0.7	0.9	1.2	1.8	1.7	2.7	3.1	1.8	1.8	1.7	0.9	0.8	0.5
21	0.7	0.8	1.8	3.1	1.7	1.7	1.7	1.7	1.7	1.7	1.2	0.8	0.5
22	0.8	0.9	1.2	1.8	1.8	2.1	2.3	2.0	1.8	1.3	1.1	0.8	0.5
23	0.5	0.8	1.0	1.2	1.3	1.8	3.1	1.8	2.8	1.3	1.2	0.8	0.5
24	0.5	0.8	1.2	1.2	1.4	2.0	2.3	1.8	1.4	1.3	1.1	0.6	0.5
25	0.7	2.9	1.1	1.2	2.0	1.8	1.8	3.9	1.9	1.4	1.2	0.8	1.2
26	0.5	0.8	1.2	1.4	1.8	1.8	2.8	2.0	1.8	1.3	1.2	0.8	0.5
27	0.5	0.8	1.0	1.5	1.8	1.8	1.9	p5.1	1.8	1.2	1.1	0.8	0.5
28	0.6	0.8	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.2	1.2	0.8	0.5
29	0.5	0.8	1.0	1.2	1.8	1.8	2.8	1.8	1.4	1.1	1.1	0.8	1.2
30	0.8	0.9	1.2	1.4	1.8	1.8	1.0	1.8	1.8	1.4	1.2	0.8	0.8
31	0.8	0.8	1.2	1.2	2.7	2.1	2.7	3.0	1.8	1.3	1.2	1.0	0.8
* MEAN	0.7	0.9	1.2	1.7	1.9	2.1	2.3	2.1	1.8	1.4	1.1	0.8	0.6

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.4	2.3	3.1	3.5	3.6	3.9	3.8	3.8	...b	3.0	2.8	2.2	1.0
2	1.3	2.4	3.0	3.5	3.6	3.8	3.8	3.8	3.6	3.3	2.9	2.2	0.8
3	1.1	2.4	3.0	3.4	3.7	3.8	3.8	3.8	3.6	3.4	2.8	2.3	1.2
4	1.4	2.6	3.2	3.6	3.9	4.0	4.0	3.9	3.7	3.4	3.0	2.4	1.2
5	1.4	2.5	3.1	3.5	3.7	3.9	4.0	3.9	3.9	3.5	2.9	2.3	1.3
6	1.4	2.5	3.1	3.5	4.0	4.1	4.3	4.2	3.8	3.5	3.1	2.3	1.2
7	1.4	2.5	3.2	3.6	3.9	3.9	4.0	4.0	3.8	3.5	3.1	2.3	1.2
8	1.4	2.5	3.2	3.6	4.0	4.0	4.1	3.9	2.8	3.5	3.0	2.3	1.2
9	1.4	2.5	3.1	3.6	3.8	4.0	3.9	4.0	3.8	3.6	3.0	2.4	1.0
10	1.1	2.4	3.0	3.0	4.0	4.0	4.4	3.8	3.5	3.0	3.0	2.4	1.2
11	1.4	2.5	3.2	3.7	3.9	4.1	4.1	4.1	3.8	3.5	3.1	2.4	1.0
12	1.2	2.5	3.1	3.6	3.9	4.0	4.1	3.9	3.8	3.5	3.1	2.5	1.2
13	1.2	2.6	3.2	3.6	3.9	4.0	4.0	4.0	3.8	3.5	3.1	2.4	1.3
14	1.4	2.5	3.1	3.6	3.8	3.9	3.9	3.8	3.8	3.5	3.1	2.3	1.2
15	1.4	2.5	3.1	3.6	3.8	3.9	3.9	4.0	3.7	3.4	3.0	2.4	1.4
16	1.3	2.4	3.2	3.5	3.8	3.9	4.0	4.1	3.8	3.6	3.1	2.3	1.2
17	1.4	2.6	3.1	3.5	3.8	4.0	4.0	3.9	3.8	3.5	3.1	2.4	1.4
18	1.4	2.5	3.1	3.5	3.9	4.0	4.0	4.2	3.8	3.5	3.1	2.5	1.3
19	1.4	2.5	3.1	3.5	3.8	3.9	4.0	4.0	3.8	3.5	3.1	2.5	1.3
20	1.4	2.4	3.1	3.5	3.7	4.0	4.3	4.0	3.8	3.5	3.1	2.5	1.4
21	1.4	2.5	3.2	3.8	3.8	3.9	4.0	4.0	3.8	3.6	3.1	2.3	1.2
22	1.4	2.5	3.2	3.6	3.7	3.9	4.0	4.0	3.8	3.5	3.1	2.5	1.3
23	1.4	2.5	3.1	3.5	3.7	3.8	3.9	4.0	3.8	3.6	3.1	2.5	1.2
24	1.2	2.6	3.1	3.7	3.8	4.0	4.1	4.0	3.8	3.5	3.0	2.4	1.4
25	1.4	2.5	3.1	3.5	3.9	4.0	4.0	4.6	3.8	3.5	3.1	2.4	1.2
26	1.1	2.5	3.1	3.5	3.8	4.0	4.1	4.0	3.9	3.6	3.1	2.5	1.4
27	1.3	2.5	3.1	3.5	3.8	4.0	4.0	...b	3.9	3.4	3.0	2.4	1.0
28	1.3	2.5	3.1	3.6	3.8	3.9	3.9	4.0	3.8	3.5	3.1	2.4	1.4
29	1.4	2.5	3.1	3.6	3.9	4.0	4.1	4.0	3.8	3.5	3.1	2.5	1.2
30	1.4	2.7	3.1	3.5	3.8	3.9	4.0	4.0	3.1	3.5	3.1	2.5	1.4
31	1.5	2.6	p3.5	3.8	3.9	4.1	4.1	4.2	3.8	3.6	3.1	2.5	1.5
* MEAN	1.3	2.5	3.1	3.6	3.8	4.0	4.0	4.0	3.7	3.5	3.1	2.4	1.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 31

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1938 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — AUGUST 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.0	7.7	7.4	6.0	5.1	...	...	...	...	...	...	10.4	10.5	10.2	10.5	10.5	9.3	8.7	8.5	7.5	6.8	7.2	8.0	8.5	...
2	9.0	8.9	8.6	8.1	8.2	8.0	7.9	7.4	9.7	10.3	10.6	10.5	10.1	9.8	9.9	10.0	9.7	9.7	9.3	8.5	8.8	9.5	10.0	10.3	9.3
3	9.9	6.8	5.9	6.5	5.6	5.0	5.0	8.0	10.0	10.6	10.6	10.6	10.7	9.3	9.5	9.5	9.5	9.0	7.8	7.0	9.8	10.7	8.0	6.4	8.4
4	6.5	6.4	5.7	4.6	4.2	p6.0	4.3	7.7	10.3	11.2	11.7	11.7	11.1	10.6	10.0	9.7	10.0	9.8	9.3	8.5	8.4	9.0	9.2	8.8	8.5
5	9.4	10.2	10.2	9.2	9.2	9.0	9.1	9.6	8.9	9.5	9.6	9.9	10.0	10.1	9.6	9.3	8.8	8.8	8.7	8.4	8.0	7.5	7.0	6.6	9.0
6	6.9	7.5	7.8	6.8	5.6	4.5	4.6	8.1	9.8	10.6	10.8	11.0	11.2	11.2	12.1	11.8	10.9	10.1	9.3	8.4	8.4	8.2	8.5	9.1	8.9
7	8.7	8.4	7.7	6.2	5.2	4.7	5.4	8.1	9.5	10.6	10.8	9.9	10.5	11.1	11.6	11.0	10.6	10.2	9.1	8.2	8.1	8.5	8.2	8.9	8.8
8	8.5	8.0	7.2	5.9	5.3	5.0	5.5	8.4	10.4	11.0	10.9	10.0	9.8	9.5	9.4	10.0	9.7	10.6	10.2	9.3	10.1	9.8	10.3	9.4	8.9
9	9.0	7.9	7.0	5.8	4.8	4.8	5.0	8.6	9.5	10.3	10.3	10.5	9.6	9.8	9.4	9.3	9.6	9.5	8.9	8.4	8.4	8.2	8.1	7.5	8.3
10	7.3	7.0	7.1	7.2	8.3	7.8	7.9	10.0	11.0	11.8	11.9	12.5	12.1	11.9	11.5	11.1	10.3	9.4	8.9	7.2	7.3	7.8	8.7	7.5	9.3
11	7.6	7.5	7.8	6.8	6.2	5.8	5.5	3.7	10.5	11.4	11.6	12.0	12.2	12.3	11.6	10.9	9.8	9.6	9.7	9.4	9.7	10.2	9.5	8.7	9.4
12	8.3	8.2	7.4	7.0	6.5	6.0	6.6	8.9	10.7	11.9	12.6	12.2	12.0	12.2	11.8	11.1	10.5	10.2	10.2	10.0	9.1	10.8	11.0	9.2	9.8
13	9.4	7.7	5.6	4.0	3.0	2.7	4.3	8.2	10.3	11.1	11.6	11.5	10.7	10.7	10.4	10.0	9.6	9.7	9.4	8.1	8.0	8.2	7.9	6.5	8.3
14	6.3	5.9	5.4	4.8	4.6	...	...	...	...	10.9	11.1	11.0	10.9	10.6	10.2	9.5	8.9	9.0	8.7	7.6	7.7	7.8	8.0	7.7	...
15	7.5	7.4	6.5	5.6	4.9	4.3	5.2	8.3	10.1	10.7	10.6	10.8	10.9	10.6	10.1	9.5	9.0	8.9	8.6	7.8	7.8	7.6	7.5	6.6	8.2
16	6.9	6.7	6.1	5.5	4.6	4.0	5.4	8.2	10.1	11.3	11.3	11.4	11.5	10.6	10.8	10.2	9.3	8.5	7.8	6.8	5.9	p11.8	p11.5	p8.5	8.5
17	6.4	p9.5	p9.5	4.9	3.7	p4.0	p5.5	8.0	9.4	10.4	10.8	11.0	11.5	10.6	10.0	9.3	9.2	9.5	9.5	9.4	9.0	9.4	10.3	10.3	8.8
18	...	...	...	...	...	...	...	...	10.1	11.4	11.5	11.8	12.2	11.2	10.7	10.4	10.5	10.2	9.2	8.3	8.4	8.8	8.6	7.3	...
19	7.2	7.0	7.0	6.3	4.9	4.2	p5.6	8.0	9.9	10.9	10.9	10.9	10.7	9.9	9.6	9.6	9.4	9.3	9.1	8.0	7.9	8.1	8.3	7.9	8.4
20	6.3	p6.9	5.5	5.2	4.9	4.5	5.5	8.6	10.5	11.2	11.4	10.6	10.7	10.3	10.2	10.0	9.5	9.4	9.6	8.7	8.0	8.0	7.9	8.6	8.4
21	9.[illegible]	[illegible].8	5.6	4.0	4.2	4.0	5.0	8.1	10.4	11.5	12.2	12.2	11.2	10.1	9.2	9.5	9.5	9.5	9.1	7.7	7.4	8.0	7.7	6.4	8.3
22	7.1	6.4	6.0	5.3	4.6	3.9	4.1	8.0	9.8	11.0	10.2	10.5	10.5	11.0	11.3	10.5	10.6	10.3	10.1	9.6	9.1	9.2	9.2	11.8	8.8
23	10.1	11.6	10.7	10.2	7.5	3.0	4.9	8.7	9.6	10.0	10.3	10.6	10.7	10.4	10.3	10.1	9.7	9.0	8.6	8.1	7.9	7.7	7.7	7.1	8.9
24	7.9	8.1	6.8	6.9	6.0	4.4	5.2	8.5	10.5	11.2	10.6	10.2	9.8	10.1	10.2	10.3	10.5	10.7	10.0	8.2	7.4	8.0	11.9	7.9	8.8
25	7.6	7.5	6.0	5.6	4.6	3.6	4.8	8.5	10.9	11.7	11.5	11.4	11.0	10.7	10.7	10.7	11.0	10.7	10.5	9.2	8.7	10.3	9.8	10.4	9.1
26	8.8	8.2	6.7	4.9	4.7	4.5	5.6	8.5	10.3	10.4	9.7	9.4	9.0	9.3	9.5	9.5	9.3	9.1	9.1	7.6	7.1	7.9	8.2	8.2	8.1
27	6.9	6.7	5.7	4.8	3.4	2.9	5.1	8.6	10.4	10.6	10.3	10.4	10.1	10.0	9.9	9.8	10.1	9.8	9.6	8.8	9.4	10.4	...	...	...
28	...	...	...	...	...	...	...	...	...	...	10.7	10.5	10.3	10.2	10.0	9.8	9.8	9.5	9.2	8.6	7.6	7.9	9.2	9.0	...
29	8.8	7.9	7.0	5.1	3.9	3.6	5.4	8.7	10.6	11.5	11.4	11.0	10.5	10.4	9.6	9.5	9.7	10.1	10.2	9.5	9.3	9.3	8.8	7.9	8.7
30	8.1	8.4	8.5	7.2	p6.2	4.6	6.0	9.2	11.1	11.2	11.6	11.4	12.0	12.4	11.2	10.5	10.3	9.2	8.7	p12.0	p12.4	10.1	p12.4	10.1	9.7
31	8.4	p9.0	p10.0	p6.7	4.8	4.2	5.7	9.1	10.9	11.9	12.3	12.5	12.9	12.4	12.2	11.3	10.7	11.1	9.7	8.8	7.1	p11.3	8.0	p10.5	9.6
MEAN*	8.0	7.9	7.2	6.1	5.3	4.8	5.6	8.5	10.2	11.0	11.0	11.0	10.9	10.6	10.4	10.1	9.8	9.7	9.3	8.4	8.2	9.0	9.0	8.5	8.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 32

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1938 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — AUGUST 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	210	210	210	240	...c	...c	...c	...c	...c	...c	280	340	290	280	300	290	260	300	410	370	260	200	230	...
2	230	230	260	270	250	250	310	240	280	280	280	270	290	280	300	300	280	250	300	350	320	250	210	220	272
3	200	240	250	240	230	220	280	250	260	260	270	280	290	280	280	280	270	260	320	300	240	210	220	240	257
4	230	210	230	260	280	550	340	260	270	270	270	280	290	300	310	300	260	260	310	400	310	240	230	220	287
5	240	250	260	250	250	250	270	240	270	280	260	290	300	300	310	280	260	260	300	350	310	200	250	230	272
6	220	230	220	210	210	240	260	250	270	270	288	260	270	290	430	300	300	260	310	370	320	260	230	220	270
7	220	230	230	210	230	240	280	250	260	270	280	280	280	280	300	320	270	260	310	370	300	240	210	220	264
8	220	210	220	240	230	230	260	240	250	280	270	280	290	260	300	290	260	240	300	340	250	230	220	220	256
9	210	220	220	230	230	230	270	240	250	280	280	290	300	280	390	310	290	250	300	370	290	250	230	220	268
10	230	220	250	270	240	230	300	250	260	210	290	280	300	230	290	390	260	260	320	410	340	260	220	220	280
11	210	230	230	230	220	220	250	250	260	2 0	270	270	270	350	280	300	280	260	290	280	250	230	220	210	257
12	230	220	230	240	230	250	280	240	260	270	270	260	280	300	300	420	330	260	290	380	330	250	220	220	273
13	220	220	210	220	250	250	260	240	260	280	290	230	230	300	300	260	250	250	310	300	310	230	210	210	262
14	210	200	210	220	230	...	...	...	...	260	290	230	270	290	290	290	250	270	320	410	280	210	210	210	...
15	210	220	210	220	225	240	280	240	270	290	300	300	300	310	300	260	260	250	300	370	350	200	210	210	267
16	220	210	210	210	220	250	270	240	260	270	280	290	300	340	330	330	260	250	300	400	330	300	210	250	272
17	210	210	200	210	220	260	290	250	260	270	270	300	300	230	320	280	260	250	300	340	300	250	210	210	262
18	...	...	...	...	...	...	...	...	200	210	290	300	310	300	300	300	260	260	300	310	280	250	220	220	...
19	230	210	210	220	220	240	290	240	260	280	290	300	320	290	280	275	270	250	300	310	330	240	210	210	261
20	210	230	210	240	230	240	280	240	270	270	290	310	300	340	320	310	260	250	300	380	350	300	230	220	274
21	220	210	210	230	230	260	250	240	250	250	280	320	320	300	280	260	260	270	320	380	330	250	250	220	270
22	240	220	220	230	220	260	260	240	270	310	260	340	300	300	310	330	270	250	300	350	320	250	230	230	273
23	230	230	250	230	210	240	280	250	260	280	270	260	290	280	300	300	260	270	300	300	290	270	230	230	263
24	220	220	230	230	220	230	260	250	270	270	290	300	320	300	300	330	360	260	310	380	300	220	220	210	271
25	220	220	230	230	230	240	280	240	260	280	270	280	340	290	300	270	250	250	300	350	300	250	220	210	263
26	220	220	210	240	260	240	280	240	270	280	280	270	330	300	360	270	260	250	310	350	300	240	210	210	267
27	220	230	220	230	230	250	270	240	270	280	290	300	290	290	320	290	270	250	300	380	300	230	...	...	...
28	...	...	...	...	...	...	...	...	...	...	280	300	310	300	300	310	250	250	300	360	350	280	210	210	...
29	200	210	210	210	250	260	280	250	270	270	270	280	280	300	300	270	260	250	310	400	360	270	200	210	265
30	240	220	230	210	230	240	260	250	260	280	270	300	270	270	290	270	260	250	310	380	400	310	250	210	269
31	210	210	210	230	230	270	280	250	250	260	280	300	260	300	275	290	270	250	300	400	400	350	250	200	272
MEAN*	220	220	224	230	233	257	279	245	255	279	280	289	297	298	308	300	271	255	305	363	317	256	221	218	268

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 33

AUGUST 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1938

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	...	5.5	5.5	5.5	5.3	5.2	4.7	...	...
2	...	...	5.0	5.3	5.4	5.5	5.5	5.5	5.5	5.3	4.6	...	...
3	...	...	4.8	5.1	5.3	5.6	5.5	5.5	5.4	5.1	4.7	...	...
4	...	...	5.0	5.3	5.3	5.5	5.5	5.5	5.5	5.3	4.2	...	...
5	...	...	4.8	5.4	5.5	5.6	5.2	5.5	5.5	5.0	4.2	...	...
6	...	...	4.8	5.2	5.4	5.4	5.4	5.5	5.4	5.6	5.0	...	...
7	...	...	4.5	5.2	5.5	5.6	5.5	5.5	5.5	5.4	4.4	...	...
8	...	...	4.8	5.5	5.4	5.6	5.7	5.5	5.6	5.4	4.5	...	...
9	...	...	4.8	5.5	5.5	5.8	5.6	5.4	5.9	5.4	4.8	...	...
10	...	...	5.0	5.5	5.5	5.6	6.0	5.5	5.5	6.1	4.5	...	...
11	...	...	4.5	5.5	5.5	5.4	5.5	6.4	5.5	5.5	4.7	...	...
12	...	...	5.0	5.5	5.5	5.3	5.6	5.7	5.6	7.0	5.6	...	...
13	...	...	5.0	5.5	5.6	5.6	5.5	5.6	5.5	5.0	4.3	...	...
14	...	...	...	5.3	5.5	5.6	5.5	5.4	5.5	5.3	4.1	...	...
15	...	...	5.0	5.5	5.5	5.4	5.2	5.2	5.3	5.0	4.4	...	...
16	...	...	5.0	5.3	5.4	5.5	5.5	5.5	5.5	5.3	4.3	...	...
17	...	...	4.8	5.3	5.4	5.5	5.5	5.4	5.5	5.0	4.4	...	...
18	...	...	5.0	5.5	5.5	5.4	5.4	5.3	5.4	5.2	4.8	...	...
19	...	...	4.7	5.4	5.5	5.4	5.5	5.3	5.2	5.1	4.6	...	...
20	...	...	5.0	5.3	5.5	5.7	5.6	5.8	5.6	5.4	4.5	...	...
21	...	...	5.2	5.3	5.5	5.6	5.6	5.2	5.3	4.7	4.0	...	...
22	...	...	5.0	5.4	5.4	5.9	5.4	5.5	5.5	5.6	4.5	...	...
23	...	...	4.5	5.4	5.3	5.1	5.5	5.4	5.4	5.4	4.0	...	...
24	...	...	5.1	5.3	5.5	5.6	5.7	5.5	5.4	5.6	5.4	...	...
25	...	...	5.0	5.2	5.3	5.4	5.8	5.4	5.4	4.8	4.3	...	...
26	...	...	4.6	5.4	5.5	5.4	5.7	5.6	5.7	4.8	4.2	...	...
27	...	...	5.0	5.3	5.5	5.4	5.5	5.5	5.3	4.8	4.5	...	...
28	...	...	...	...	5.4	5.3	5.5	5.3	5.3	5.3	4.2	...	...
29	...	...	5.0	5.1	5.4	5.4	5.4	5.3	5.2	5.0	4.2	...	...
30	...	...	4.9	5.4	5.5	5.7	5.5	5.5	5.5	5.0	4.2	...	...
31	...	...	4.4	5.2	5.5	5.4	5.4	5.5	5.4	5.2	4.6	...	...
MEAN*	...	...	4.9	5.4	5.4	5.5	5.5	5.5	5.5	5.3	4.5	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	...	200	210	210	210	210	250	...	...
2	...	...	220	200	200	180	190	200	210	210	220	...	...
3	...	...	230	210	190	200	200	200	200	210	220	...	...
4	...	...	230	200	210	210	200	200	210	230	240	...	...
5	...	...	230	225	210	200	210	200	200	220	230	...	...
6	...	...	230	230	210	200	200	200	210	220	230	...	...
7	...	...	230	220	200	190	190	190	190	220	240	...	...
8	...	...	230	220	200	200	200	190	220	200	230	...	...
9	...	...	220	220	200	200	190	190	200	210	230	...	...
10	...	...	230	200	200	180	200	190	190	200	230	...	...
11	...	...	240	220	200	200	210	210	200	220	230	...	...
12	...	...	230	220	200	200	200	200	210	200	210	...	...
13	...	...	230	210	200	200	200	200	200	200	200	...	...
14	...	...	...	210	200	190	200	200	200	190	200	...	...
15	...	...	230	210	200	200	200	190	190	200	220	...	...
16	...	...	220	200	200	190	200	200	190	200	200	...	...
17	...	...	220	210	200	190	180	200	200	210	210	...	...
18	...	...	230	210	210	210	200	200	200	200	220	...	...
19	...	...	230	210	200	190	190	190	200	210	230	...	...
20	...	...	220	210	200	180	200	190	180	190	210	...	...
21	...	...	220	210	200	210	200	190	180	180	220	...	...
22	...	...	220	220	200	200	200	180	190	210	220	...	...
23	...	...	230	230	200	200	200	190	200	200	220	...	...
24	...	...	230	210	200	200	190	190	200	200	210	...	...
25	...	...	220	210	200	180	210	200	200	200	200	...	...
26	...	...	230	210	200	200	200	190	190	190	230	...	...
27	...	...	230	210	200	200	200	200	210	200	230	...	...
28	...	...	...	...	200	200	200	200	200	200	210	...	...
29	...	...	220	210	200	200	200	200	190	200	210	...	...
30	...	...	230	220	220	200	210	200	200	200	220	...	...
31	...	...	230	210	210	200	200	210	210	210	210	...	...
MEAN*	...	...	227	213	202	197	199	197	199	204	220	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 34

AUGUST 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1938

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	...	2.7	2.7	2.7	1.8	1.7	2.7	1.0	0.5
2	0.5	0.7	0.9	1.2	1.6	1.7	1.8	1.7	1.7	1.7	1.2	0.8	0.5
3	0.5	0.8	1.2	1.2	1.7	1.7	1.7	1.7	1.7	1.2	1.0	0.5	0.5
4	0.5	0.8	1.0	1.3	2.7	2.0	3.0	2.7	1.7	2.7	1.0	0.8	0.5
5	0.5	1.0	1.2	3.5	2.8	1.7	2.8	1.9	3.0	2.7	1.2	0.8	0.5
6	0.5	0.8	1.2	3.0	2.6	1.8	1.8	1.8	1.8	1.8	0.9	0.5	0.6
7	0.5	0.5	1.1	1.2	1.3	1.7	1.8	1.8	1.8	1.3	0.8	0.6	0.6
8	0.5	0.5	1.1	1.2	1.7	1.8	2.0	1.9	1.8	1.8	1.2	0.8	0.5
9	0.5	0.6	1.0	1.3	1.8	1.7	1.7	1.8	1.3	1.2	1.0	0.5	0.6
10	0.5	0.8	0.9	1.2	1.7	1.7	1.8	1.8	1.4	1.2	1.0	0.6	0.6
11	0.8	0.8	1.2	1.8	1.8	2.0	1.8	1.8	1.5	1.2	1.0	0.8	0.5
12	0.5	0.5	0.9	1.2	1.8	1.8	1.9	1.8	1.8	1.3	1.0	0.6	0.5
13	0.5	0.5	0.8	1.0	1.2	1.7	1.7	1.3	1.2	1.0	0.7	0.5	0.5
14	...	...	...	1.7	1.8	1.7	1.7	1.9	1.7	1.4	1.0	0.8	1.2
15	0.5	0.5	1.1	2.0	1.8	1.8	1.8	1.8	1.8	1.2	1.0	0.5	0.6
16	0.5	0.8	1.0	1.4	1.2	1.7	1.7	1.7	1.8	1.2	0.8	0.5	0.5
17	0.5	0.5	1.1	0.8	1.2	1.2	1.2	1.7	1.8	1.2	0.8	0.8	0.5
18	...	...	0.9	1.1	1.3	1.8	3.1	3.1	2.8	1.8	1.0	0.6	0.6
19	0.5	0.8	0.9	1.2	1.2	1.3	1.4	1.4	1.7	1.3	0.8	0.5	0.8
20	0.5	0.8	1.1	1.7	1.8	1.8	1.8	1.9	1.8	1.8	1.3	0.9	0.6
21	0.5	0.8	1.2	1.4	1.8	3.3	2.7	1.9	1.7	1.2	1.0	0.6	0.5
22	0.5	0.7	1.2	1.2	1.7	1.8	2.7	1.7	1.2	1.0	0.8	0.5	0.8
23	0.5	0.8	0.9	1.0	1.7	1.8	1.8	2.7	2.2	1.8	1.0	0.8	0.6
24	0.5	0.6	0.9	1.0	1.7	1.7	1.7	1.8	1.0	1.8	1.1	0.8	0.8
25	0.5	0.7	0.9	1.7	1.8	2.7	2.7	1.9	1.9	1.7	1.7	0.8	0.6
26	0.5	0.7	0.5	1.2	1.7	1.8	2.7	1.8	1.7	1.4	1.2	0.8	0.8
27	0.5	0.8	1.1	1.8	1.9	2.7	2.8	2.7	1.7	1.2	1.1	0.8	0.8
28	...	...	...	...	1.7	1.8	1.8	1.8	1.7	1.7	1.2	0.8	0.7
29	0.5	0.6	0.8	1.0	1.7	2.7	2.0	1.7	1.7	1.6	1.2	0.9	0.5
30	0.6	0.6	1.3	1.9	2.9	2.7	2.7	2.7	1.8	1.7	1.2	1.0	0.8
31	0.5	0.8	1.3	1.2	2.7	2.9	2.7	3.5	1.7	1.6	0.9	0.6	0.5
* MEAN	0.5	0.7	1.0	1.5	1.8	2.0	2.1	2.0	1.8	1.5	1.1	0.7	0.6

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	...	4.0	4.1	4.0	3.8	3.6	3.5	2.4	1.2
2	1.4	2.5	3.2	3.5	3.8	4.0	4.3	4.0	3.8	3.6	3.1	2.5	1.3
3	1.4	2.5	3.2	3.6	3.8	4.0	4.1	4.0	3.9	3.6	3.1	2.5	1.4
4	1.4	2.6	3.2	3.7	4.0	4.1	4.2	4.1	4.0	3.8	3.2	2.6	1.4
5	1.5	2.5	3.2	4.0	4.1	4.1	4.1	4.0	4.0	3.7	3.2	2.5	1.4
6	1.4	2.7	3.3	3.8	3.8	3.9	4.0	4.0	3.9	3.6	3.2	2.4	1.4
7	1.4	2.6	3.1	3.5	3.8	3.9	4.0	4.0	3.8	3.6	3.2	2.4	1.3
8	1.4	2.8	3.1	3.6	3.8	4.1	4.1	4.0	3.9	3.4	3.1	2.4	1.3
9	1.4	2.7	3.2	3.6	3.9	4.0	4.0	4.0	3.9	3.6	3.1	2.4	1.3
10	1.4	2.6	3.2	3.7	3.9	4.0	4.0	4.0	3.8	3.7	3.2	2.5	1.2
11	1.4	2.5	3.2	3.6	3.8	4.0	4.0	4.0	3.8	3.5	3.2	2.5	1.3
12	1.4	2.6	3.2	3.7	3.8	4.0	4.1	4.0	3.8	3.5	3.1	2.6	1.5
13	1.6	2.8	3.3	3.6	3.9	4.0	4.0	3.9	3.7	3.5	3.1	2.5	1.3
14	...	...	...	3.6	4.0	4.0	4.1	4.0	3.8	3.6	3.1	2.5	1.5
15	1.6	2.6	3.2	3.6	3.8	3.9	4.0	4.0	3.8	3.5	3.1	2.6	1.3
16	1.6	2.7	3.2	3.5	3.7	4.0	4.0	4.0	3.8	3.6	3.1	2.5	1.3
17	1.5	2.6	3.2	3.6	3.8	4.2	4.0	4.0	3.8	3.6	3.1	2.5	1.4
18	...	...	3.2	3.5	3.8	4.0	4.2	4.2	3.8	3.6	3.1	2.5	1.4
19	1.6	2.6	3.2	3.5	3.7	3.9	3.9	3.9	3.8	3.6	3.2	2.5	1.4
20	1.5	2.6	3.2	3.4	2.8	4.0	4.0	4.0	3.7	3.6	3.1	2.4	1.3
21	1.6	2.6	3.2	3.6	2.8	4.0	4.1	3.9	3.8	3.5	3.1	2.4	1.2
22	1.5	2.6	3.1	3.6	3.8	4.0	4.0	3.9	3.7	3.5	3.1	2.4	1.3
23	1.6	2.6	3.2	3.5	3.8	3.9	3.9	3.9	3.8	3.5	3.1	2.4	1.2
24	1.6	2.6	3.2	3.5	3.8	3.9	4.0	3.9	3.8	3.5	3.1	2.5	1.4
25	1.6	2.6	3.2	3.6	3.8	3.9	4.0	4.0	3.8	3.5	3.0	2.4	1.3
26	1.6	2.6	3.3	3.7	3.9	4.0	4.1	4.0	3.7	3.6	3.1	2.4	1.3
27	1.6	2.7	3.3	3.7	3.9	4.1	4.1	4.0	3.8	3.5	3.2	2.5	1.4
28	...	...	...	...	4.0	4.0	4.1	4.0	3.8	3.6	3.1	2.5	1.4
29	1.7	2.7	3.4	3.6	3.9	4.1	4.1	4.0	3.8	3.5	3.4	2.6	1.4
30	1.6	2.8	3.6	3.7	4.0	4.1	4.2	4.1	3.9	3.6	3.2	2.5	1.6
31	1.7	2.7	3.4	3.7	4.0	4.1	4.1	4.1	3.9	3.6	3.2	2.4	1.4
* MEAN	1.5	2.6	3.2	3.6	3.8	4.0	4.1	4.0	3.8	3.6	3.2	2.5	1.3

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 35

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1938 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND SEPTEMBER 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p9.8	7.2	7.2	6.3	5.0	4.2	6.0	9.6	11.5	12.4	12.3	12.5	12.2	10.9	10.5	10.5	10.7	10.2	10.1	8.5	p12.2	p12.7	8.8	p12.0	9.7
2	9.0	8.0	7.2	5.9	5.0	4.2	5.6	9.0	11.1	11.9	12.2	12.0	11.5	10.9	10.5	11.1	9.8	9.5	9.5	8.0	p10.0	p11.5	p9.5	p9.5	9.3
3	p8.5	p8.5	p7.2	6.6	5.5	4.5	6.0	9.5	11.7	12.6	13.2	13.8	13.9	13.1	12.6	12.0	11.9	11.0	9.4	8.6	9.1	9.8	9.0	8.0	9.8
4	7.3	7.7	8.2	7.0	6.5	6.0	6.6	9.1	11.5	12.6	12.5	11.9	11.8	11.9	11.6	10.8	10.4	10.2	9.9	8.4	p11.5	8.3	7.8	8.0	9.5
5	7.5	6.7	5.9	5.5	5.3	4.7	6.4	9.6	11.5	12.5	12.0	11.9	12.0	12.7	12.5	11.5	10.5	10.0	9.6	8.7	8.2	8.0	9.0	8.3	9.2
6	7.7	7.2	6.6	5.8	4.9	p5.5	p6.4	9.5	11.5	12.1	12.4	12.4	12.4	12.0	12.1	11.9	11.3	9.9	9.1	7.4	p11.7	p11.6	p11.7	p10.3	9.7
7	6.5	6.8	6.7	7.4	8.4	8.0	p9.6	p11.0	11.6	...c	12.4	12.2	11.4	11.0	11.1	10.8	10.2	10.0	9.6	8.0	p11.8	p10.4	p11.6	8.4	...
8	p9.3	p8.4	7.1	p6.3	5.1	5.0	6.7	9.6	11.0	10.5	9.8	9.8	10.4	10.3	10.7	10.7	10.2	10.0	9.4	7.8	p12.2	p10.0	p10.1	p9.7	9.2
9	7.5	7.1	6.2	5.1	4.7	4.4	6.3	9.6	11.2	12.0	11.9	11.4	10.9	10.7	10.4	10.4	10.2	10.3	10.4	9.5	9.6	9.8	9.0	p10.2	9.1
10	8.3	7.9	7.0	6.6	6.2	5.9	7.0	9.1	10.4	11.1	11.2	11.1	11.0	11.7	11.8	11.9	12.2	11.4	10.9	9.9	p13.8	p12.8	p12.0	p9.9	10.0
11	p9.7	p9.1	7.0	5.0	4.5	4.7	5.9	8.7	10.2	10.9	11.0	11.0	10.6	10.3	9.8	9.6	9.7	9.6	9.2	8.0	p12.0	p12.0	8.5	7.9	9.0
12	7.5	6.7	p7.0	4.6	4.3	4.6	5.3	9.0	10.7	11.9	12.4	12.8	13.1	13.6	14.0	13.8	13.1	12.3	11.7	10.2	p13.6	9.2	9.0	8.6	10.0
13	8.5	8.1	7.2	6.6	6.1	6.4	7.5	9.7	11.2	11.5	11.2	11.0	10.8	11.2	11.3	10.6	10.3	10.2	10.2	10.4	11.0	11.4	10.2	8.7	9.6
14	9.5	10.5	8.4	8.0	8.0	7.5	8.5	10.6	11.5	12.3	12.0	11.5	11.0	11.9	12.4	12.6	12.9	12.5	11.6	9.5	8.6	p12.0	p10.5	8.0	10.5
15	8.3	p10.2	p10.8	p11.5	p9.7	p9.6	p10.0	9.6	12.2	12.5	12.6	12.2	12.5	13.0	12.5	12.3	11.4	11.6	12.0	11.2	10.5	9.3	8.5	9.5	11.0
16	10.1	10.2	8.7	7.9	7.1	7.2	8.6	11.1	12.3	12.8	12.5	10.3	9.7	9.6	9.6	9.8	10.5	11.2	11.2	9.8	p12.3	p12.0	8.3	7.8	10.0
17	p9.7	7.0	6.7	6.0	5.2	5.0	7.0	10.8	11.2	12.0	12.0	11.4	11.2	11.2	11.5	11.3	10.4	9.9	9.5	8.4	7.5	p11.7	p11.6	8.0	9.4
18	7.2	7.0	6.0	5.4	4.6	4.8	6.7	9.4	10.9	11.5	11.6	10.5	9.8	10.0	9.8	10.0	10.1	10.0	9.7	8.4	p12.4	7.8	8.0	7.0	8.7
19	5.8	5.7	5.1	4.2	4.0	3.5	6.1	8.9	10.5	...c	...c	...c	11.9	12.0	11.9	11.3	11.3	11.2	10.8	9.8	8.8	p12.5	8.2	8.1	...
20	8.0	7.6	7.2	6.2	5.5	5.4	7.8	...c	...c	...c	9.9	9.5	9.4	9.8	9.8	9.6	9.4	9.0	8.7	7.7	p11.8	7.5	p11.5	p10.1	...
21	p9.0	6.6	5.6	5.2	4.2	3.5	6.1	9.4	10.8	11.6	11.8	11.3	10.9	11.1	11.3	11.6	11.5	10.7	8.8	8.8	8.4	p8.5	8.5	8.4	8.9
22	p8.4	7.7	6.2	5.2	4.3	3.1	6.2	9.5	10.9	10.3	10.7	10.9	10.9	11.3	11.9	...c	...c	10.6	8.9	8.4	8.1	8.0	7.8	8.2	...
23	7.4	7.4	6.7	6.6	p13.2	p8.4	6.0	9.9	11.3	11.3	11.0	10.4	10.0	10.4	10.6	10.6	10.5	10.1	9.4	7.9	p12.0	p11.6	p11.5	9.1	9.7
24	9.1	8.5	7.0	5.0	3.7	2.6	6.1	9.6	11.0	10.5	10.3	10.4	10.7	11.5	12.2	12.8	13.6	13.5	12.5	p12.2	p12.6	p12.5	p12.7	p12.7	10.1
25	p11.5	p8.5	p7.0	p5.6	p5.6	p3.9	6.7	10.2	11.8	12.1	11.6	11.0	10.7	11.0	11.2	11.9	12.3	12.0	11.4	9.3	p12.4	p12.2	p11.5	p11.8	10.1
26	p11.5	p9.5	7.1	5.5	2.9	1.9	7.0	9.8	11.2	12.6	12.9	12.2	10.8	11.6	12.2	12.5	12.6	12.7	12.5	10.5	10.0	10.1	10.7	11.2	10.1
27	10.0	8.5	7.9	7.0	5.7	5.0	7.9	11.1	13.1	12.8	12.4	12.2	11.8	12.2	12.3	12.4	11.8	11.5	10.1	8.9	9.9	8.9	p12.4	9.7	10.2
28	10.9	8.7	7.5	7.9	8.1	7.7	9.8	12.6	13.7	14.2	14.0	12.8	11.6	11.4	11.5	11.4	11.2	11.0	10.9	9.2	p12.3	p12.0	p12.0	p11.5	11.0
29	8.5	7.9	7.4	7.1	7.5	7.4	8.9	11.6	13.7	14.2	13.1	11.4	10.9	11.1	11.3	11.2	10.7	10.4	9.9	8.9	p12.7	p11.8	8.7	p11.9	10.3
30	8.6	7.9	6.7	5.8	5.5	5.1	8.3	11.4	13.4	14.6	...c	13.2	12.9	12.7	12.0	10.5	10.7	11.5	12.0	10.0	9.0	10.1	10.7	10.3	...
31																									
MEAN*	8.7	8.0	7.1	6.3	5.9	5.3	7.1	9.9	11.5	12.1	11.9	11.6	11.3	11.4	11.4	11.3	11.1	10.8	10.3	9.1	10.9	10.5	10.0	9.4	9.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 36

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1938 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — SEPTEMBER 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	210	210	210	210	220	230	270	240	260	270	280	280	320	300	280	280	260	250	310	350	370	300	230	230	265
2	210	200	200	220	220	230	270	240	260	270	280	300	310	290	290	280	260	260	310	420	410	300	270	220	272
3	220	210	210	210	220	230	260	240	270	270	280	270	300	300	290	290	260	250	300	370	290	250	240	250	262
4	230	230	230	230	240	250	280	240	250	270	270	290	280	280	280	290	290	260	310	440	400	320	270	240	278
5	240	220	220	240	240	250	270	240	260	270	270	280	280	300	290	310	260	260	330	440	380	320	220	250	277
6	210	210	230	230	250	240	270	240	270	280	280	280	280	300	290	280	260	250	330	450	460	320	220	260	279
7	230	230	230	240	270	250	270	250	280	...c	270	330	330	300	300	270	...c	270	320	420	400	300	300	220	...
8	230	220	220	220	250	240	270	240	250	280	300	310	320	320	280	260	270	260	310	410	400	250	240	240	274
9	220	230	220	230	250	250	260	240	260	280	290	280	310	370	310	310	270	250	300	280	300	260	230	230	268
10	220	220	230	230	250	250	270	240	270	270	300	290	280	270	300	280	260	260	310	410	400	310	210	220	273
11	220	220	230	250	260	260	280	240	250	290	270	300	310	320	310	310	310	260	300	440	350	250	210	210	277
12	210	220	230	230	300	290	260	240	260	280	290	300	300	290	290	280	260	250	300	400	300	280	210	210	270
13	230	240	260	250	290	250	280	250	270	270	280	280	290	290	310	280	270	250	300	330	250	210	210	240	266
14	230	230	270	290	280	270	270	240	270	280	280	290	290	290	280	280	280	260	310	400	400	340	240	260	284
15	250	300	350	380	300	310	260	250	270	275	280	290	280	290	280	270	260	260	290	350	310	320	290	250	290
16	230	220	250	260	280	250	250	240	260	270	300	290	300	300	280	260	250	250	300	360	340	270	210	230	269
17	250	230	240	220	230	230	250	240	260	270	300	280	320	320	320	260	300	260	300	370	370	280	200	210	271
18	220	230	240	240	250	240	270	260	260	260	300	330	320	320	300	300	280	250	300	390	380	280	220	210	276
19	230	240	230	240	250	250	270	240	270	...c	...c	...c	310	300	300	280	260	260	300	350	340	300	230	250	...
20	230	220	230	250	240	250	270	...c	...c	...c	320	340	320	...	350	260	260	260	310	400	340	320	240	260	...
21	210	230	240	230	230	240	260	250	260	280	280	310	320	300	300	260	250	260	310	380	330	300	200	220	269
22	220	230	220	240	240	270	260	240	260	280	300	300	300	290	300	...c	...c	280	300	300	270	280	250	230	...
23	210	230	260	280	310	290	260	240	260	280	300	300	...b	300	280	260	260	260	310	400	470	290	250	210	...
24	210	210	220	230	230	250	260	240	270	270	280	280	280	290	280	270	260	250	310	410	400	330	240	230	271
25	220	230	230	220	230	230	260	240	260	280	280	270	280	270	260	260	260	250	320	370	350	320	300	210	267
26	210	240	230	210	250	280	250	240	260	260	270	270	270	280	290	270	270	270	310	360	300	250	230	220	262
27	230	230	230	230	230	230	260	250	260	270	270	270	280	280	280	260	260	260	300	340	380	410	310	260	274
28	230	260	290	280	250	230	260	240	260	260	270	280	280	270	280	270	250	280	330	450	420	360	250	230	282
29	210	240	250	270	250	230	260	240	260	260	260	260	270	270	270	270	260	270	330	400	430	300	220	220	271
30	220	220	230	270	260	230	260	240	250	260	260	270	290	280	290	290	280	260	310	410	330	240	210	210	265
31																									
MEAN*	223	228	238	244	252	250	265	242	262	272	283	290	297	296	292	277	267	259	309	387	362	295	238	231	273

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

JULY 1936 JULY 1936

TABLE 35

DECLINATION

7° EAST PLUS TABULAR QUANTITIES, EXPRESSED IN TENTHS OF MINUTES

(THE TABULAR VALUES ARE AVERAGE VALUES FOR SUCCESSIVE PERIODS OF ONE HOUR AS INDICATED 75TH MERIDIAN MEAN TIME)

DAY	#	†	‡	0–1	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14	14–15	15–16	16–17	17–18	18–19	19–20	20–21	21–22	22–23	23–24	MEAN	CHARACTER	MAXIMUM H M	MAXIMUM	MINIMUM H M	MINIMUM	RANGE
1				109	112	113	113	116	121	130	133	129	120	118	117	115	104	101	102	101	100	102	102	102	103	105	107	111	0	7 19	136	14 00	98	38
2			✓	113	115	114	102	99	106	104	114	112	121	118	119	142	143	133	124	115	113	116	118	120	117	113	112	117	1	13 05	146	4 17	92	54
3	✓			113	111	107	109	113	120	130	143	145	143	133	125	115	114	114	115	113	111	107	107	108	111	113	112	118	0	8 11	151	2 50	105	46
4				112	112	112	113	113	116	132	138	135	127	122	122	121	126	124	113	105	104	104	104	105	105	104	104	116	0	7 30	141	23 44	100	41
5				103	104	98	101	99	94	103	120	121	113	108	107	105	114	118	116	114	112	112	113	113	114	114	112	110	1	8 07	124	5 02	91	33
6			✓	106	106	109	110	114	113	127	129	135	121	105	96	104	106	105	104	100	101	99	104	110	112	115	115	110	1	7 07	153	11 12	93	60
7				114	114	114	115	114	113	124	143	133	117	110	106	109	112	109	104	100	96	103	103	104	108	112	112	112	0	7 40	146	17 30	94	52
8				113	113	112	113	116	118	118	123	125	124	116	111	109	112	110	113	112	105	104	104	106	107	110	111	113	0	9 00	131	19 00	102	29
9				112	112	113	114	115	115	116	121	121	116	108	104	111	122	117	110	105	103	106	104	106	109	112	111	112	0	13 47	124	17 10	101	23
10			✓	110	109	114	115	119	123	124	129	129	124	124	119	125	136	122	111	102	100	110	113	112	114	114	113	117	1	13 17	144	16 45	95	49
11			✓	114	114	114	112	105	113	126	134	133	134	129	122	112	107	112	108	102	99	103	102	101	102	106	110	113	1	9 13	149	17 20	96	53
12				112	113	114	118	119	121	124	125	120	115	111	114	127	138	126	113	99	98	98	101	101	104	104	104	113	1	13 12	142	16 20	95	47
13				109	111	111	111	111	111	121	130	118	106	104	104	103	100	107	104	103	105	104	105	105	107	109	110	109	1	7 22	134	13 20	91	43
14	✓	✓		110	108	109	110	113	118	129	134	134	136	140	139	132	123	120	115	113	106	106	105	105	106	107	108	118	0	10 35	143	20 12	103	40
15		✓		108	106	108	112	113	113	118	119	114	112	112	105	111	114	120	121	114	105	104	105	105	106	111	113	111	0	15 10	123	22 27	94	29
16				111	114	114	116	117	123	135	144	135	121	110	102	100	101	102	93	89	92	96	98	104	105	109	111	110	0	7 24	146	16 20	86	60
17				113	114	115	118	122	124	128	128	121	112	112	103	101	101	103	104	102	100	94	93	95	104	104	106	109	1	7 46	133	18 56	91	42
18				106	108	110	112	115	118	123	126	126	123	118	115	124	133	134	119	103	97	104	104	109	110	110	110	115	1	14 10	142	17 05	94	48
19	✓			109	105	106	109	111	114	121	124	118	100	94	103	118	124	114	112	111	107	106	105	105	106	108	107	110	0	7 29	127	9 50	91	36
20	✓			104	103	105	103	113	115	123	131	124	116	118	115	109	111	108	108	107	106	105	104	104	107	108	106	111	0	7 50	134	3 16	101	33
21	✓	✓		106	104	104	104	104	110	121	134	141	135	135	131	132	138	127	110	97	94	102	101	102	104	106	104	114	0	13 22	141	17 07	92	49
22	✓			104	105	106	107	107	108	108	113	117	121	119	124	132	133	134	144	135	114	104	104	104	105	106	107	115	0	15 50	149	19 00	102	47
23	✓	✓		107	109	110	110	110	113	123	123	123	122	116	105	105	103	96	102	104	103	104	103	104	105	107	106	109	0	6 40	125	14 30	94	31
24	✓	✓		105	106	106	109	112	115	121	129	126	119	121	124	132	139	135	123	115	104	101	100	101	103	104	105	115	0	13 50	143	19 30	98	45
25	✓			105	106	107	113	115	121	133	134	129	112	110	107	102	96	104	105	108	108	104	103	104	108	110	110	111	0	7 10	140	13 20	92	48
26	✓			109	111	112	113	114	117	123	124	119	103	103	111	117	126	121	112	105	103	103	103	104	105	106	108	111	0	13 40	128	9 59	100	28
27				109	109	112	114	119	120	123	123	114	100	96	91	102	104	109	117	112	102	102	102	103	103	103	104	108	0	7 27	128	11 20	88	40
28				110	111	112	114	117	120	133	133	122	113	109	112	113	113	121	123	117	109	102	101	102	103	104	105	113	0	6 23	139	19 20	99	40
29			✓	105	104	104	98	100	96	109	121	113	119	94	83	104	108	112	103	104	105	107	112	112	111	111	111	106	1	9 32	143	11 23	64	79
30				105	105	106	106	115	121	134	147	147	135	125	123	120	125	128	124	114	112	107	105	105	106	107	106	118	0	7 57	153	2 30	103	50
31				107	109	109	106	107	109	126	134	131	123	118	122	129	125	121	117	108	104	104	105	112	109	107	106	114	0	7 03	141	18 24	102	39
MEANS ALL DAYS				109	109	110	110	112	115	123	129	126	119	115	112	116	118	116	113	107	104	104	104	106	107	108	109	113						44
MEANS TEN DAYS #				107	107	107	109	111	115	123	129	128	121	119	118	119	121	117	115	111	106	104	104	104	106	108	107	113						40
MEANS FIVE DAYS † (G. M. T.)				107	107	107	109	110	114	122	128	128	125	125	121	122	123	120	114	109	102	105 103	104 103	104	106	107	107	114						
MEANS FIVE DAYS ‡ (G. M. T.)				110	110	111	107	107	110	118	125	124	124	114	108	117	120	117	110	105	104	107	107	107	109	110	110	112						

DESIGNATIONS AND REMARKS

= TEN LEAST DISTURBED DAYS
† = FIVE INTERNATIONAL QUIET DAYS
‡ = FIVE INTERNATIONAL DISTURBED DAYS
[ ] = APPROXIMATE. MAGNETIC STORM
( ) = INTERPOLATED
⌈ ⌋ = ESTIMATED
▽ = LAMP OUT
△ = RECORD OFF SHEET
□ = CLOCK STOPPED
⊼ = NO RECORD

TABLE 36

DECLINATION

AUGUST 1936

7° EAST PLUS TABULAR QUANTITIES, EXPRESSED IN TENTHS OF MINUTES

(THE TABULAR VALUES ARE AVERAGE VALUES FOR SUCCESSIVE PERIODS OF ONE HOUR AS INDICATED 75 TH MERIDIAN MEAN TIME)

AUGUST 1936

DAY	✻	†	‡	0–1	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14	14–15	15–16	16–17	17–18	18–19	19–20	20–21	21–22	22–23	23–24	MEAN	CHARACTER	MAXIMUM H M	MAXIMUM	MINIMUM H M	MINIMUM	RANGE
1				104	101	103	108	113	120	134	142	135	121	110	100	101	109	114	112	108	110	107	104	104	108	106	104	112	0	7 30	145	1 20	95	50
2				103	102	104	108	112	119	132	139	134	128	130	127	128	122	117	111	104	99	95	97	101	103	104	105	114	0	7 30	141	18 00	93	48
3				104	104	105	110	112	113	117	120	114	103	99	99	100	101	106	112	111	103	101	101	101	103	104	102	106	0	7 32	122	11 50	95	27
4				104	105	106	109	112	117	131	135	131	120	112	110	110	110	115	121	110	101	98	97	101	102	103	104	111	0	7 33	139	19 00	95	44
5			✓	106	108	111	113	114	121	127	132	123	112	94	100	106	114	115	111	104	102	101	101	104	107	106	106	110	0	7 56	135	10 40	91	44
6			✓	109	104	106	111	113	119	127	130	126	120	118	124	120	113	112	115	109	102	102	102	103	104	106	107	113	0	7 30	134	1 40	100	34
7	✓	✓		107	107	108	110	112	113	113	108	102	98	93	96	109	114	111	113	115	104	101	100	102	103	105	105	106	0	16 15	120	10 26	91	29
8			✓	107	109	111	113	115	120	128	130	120	101	96	105	108	99	110	111	110	107	104	101	99	101	104	104	109	0	7 16	133	10 13	94	39
9				106	110	111	112	113	120	130	120	110	103	93	93	105	113	110	107	102	98	98	99	102	103	104	107	107	0	6 19	132	11 00	91	41
10			✓	109	111	111	104	111	116	126	129	112	108	111	114	121	116	112	109	103	101	101	103	103	104	107	107	110	0	7 23	145	17 41	99	46
11	✓	✓		107	106	106	109	110	110	107	101	93	91	90	101	110	121	124	123	114	106	102	102	102	103	104	105	106	0	14 54	126	10 10	85	41
12				106	108	109	110	112	112	115	112	103	98	91	89	98	99	99	105	102	101	100	100	101	103	102	104	103	0	6 47	118	11 20	86	32
13	✓			107	108	108	112	115	123	139	143	135	124	112	103	101	106	107	102	102	101	101	100	101	102	103	104	111	0	7 12	146	19 52	98	48
14				104	105	107	109	112	118	125	124	117	108	105	101	101	104	108	104	101	101	101	101	101	102	101	101	107	0	7 22	131	11 12	97	34
15				102	100	100	101	108	113	124	125	124	115	104	104	109	112	112	110	107	103	103	103	103	103	104	103	108	0	8 57	129	1 50	98	31
16				103	103	103	104	108	112	123	130	128	124	127	130	123	123	123	120	118	111	108	107	107	106	107	105	115	0	11 10	133	2 10	101	32
17	✓			103	104	103	107	111	115	125	121	108	95	93	95	95	106	119	122	116	103	102	102	102	102	103	102	106	0	6 30	129	10 19	91	38
18	✓	✓		102	103	103	104	110	115	121	114	101	91	91	91	90	99	110	113	114	109	102	101	101	102	102	103	104	0	6 27	123	11 53	86	37
19	✓	✓		102	103	104	105	110	113	118	110	99	94	95	97	102	107	109	114	110	104	103	102	102	102	103	102	105	0	6 45	122	9 46	92	30
20				102	102	103	104	105	109	118	121	118	113	105	104	103	111	116	118	114	111	107	105	104	103	103	102	108	0	7 10	124	12 27	101	23
21	✓			103	102	101	101	103	104	110	114	117	119	118	121	120	112	113	114	111	108	104	103	103	104	104	103	109	0	12 00	123	3 20	99	24
22	✓			103	102	103	103	108	112	123	128	123	115	112	115	122	121	112	103	101	101	102	102	102	102	102	103	109	0	7 33	131	16 10	99	32
23	✓	✓		103	102	102	102	104	109	114	111	104	98	95	102	109	108	103	102	99	95	100	101	101	102	102	102	103	0	7 00	118	10 30	93	25
24	✓			102	103	104	109	112	114	117	104	91	81	86	94	103	108	117	121	117	109	102	101	101	101	102	102	104	0	15 30	123	9 50	75	48
25				103	102	103	105	110	111	110	104	98	99	105	113	122	134	136	129	112	101	97	99	101	101	102	103	108	1	13 54	148	9 02	95	53
26				103	103	104	106	109	111	111	103	93	85	77	85	94	103	108	(108)	102	94	99	97	101	102	103	103	100	0	6 20	113	10 02	74	39
27				103	103	104	107	109	118	119	112	103	93	88	100	115	124	121	119	115	106	104	103	102	103	103	101	107	0	13 35	129	10 05	84	45
28				102	102	103	103	112	115	122	122	121	114	111	121	129	124	119	111	109	105	103	103	102	102	103	102	111	0	12 51	132	0 00	100	32
29				102	102	103	104	108	112	119	114	109	103	100	105	123	123	115	111	105	100	103	102	100	101	102	101	107	0	13 05	126	17 20	97	29
30			✓	105	108	107	109	112	119	131	131	122	108	91	92	100	94	102	103	104	101	96	95	99	100	100	100	105	1	6 53	133	11 26	89	44
31				104	105	107	112	117	122	120	109	95	88	83	82	90	101	102	113	114	104	103	103	102	103	104	104	104	0	5 42	124	11 03	80	44
MEANS ALL DAYS				104	104	105	107	111	115	122	121	113	105	101	104	109	111	113	112	108	103	102	101	102	103	103	103	108						38
MEANS TEN DAYS ✻				104	104	104	106	110	113	119	115	107	101	98	102	106	110	112	113	110	104	102	101	102	102	103	103	106						35
MEANS FIVE DAYS † (G. M. T.)				104	104	105	106	109	112	115	109	100	94	93	97	104	110	111	113	110	104	102 102	102 101	102	103	104	104	105						
MEANS FIVE DAYS ‡ (G. M. T.)				107	108	109	110	113	119	128	130	121	110	102	107	111	107	110	110	106	103	101	100	102	103	104	105	109						

DESIGNATIONS AND REMARKS

✻ = TEN LEAST DISTURBED DAYS
† = FIVE INTERNATIONAL QUIET DAYS
‡ = FIVE INTERNATIONAL DISTURBED DAYS
[ ] = APPROXIMATE, MAGNETIC STORM
( ) = INTERPOLATED
⌈ ⌉ = ESTIMATED
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TABLE 39

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1938 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — OCTOBER 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	8.9	8.8	8.6	8.6	10.4	9.6	10.5	13.2	13.2	13.0	12.9	11.9	11.0	10.4	10.3	10.0	9.6	9.7	9.7	8.6	8.3	8.7	9.0	9.2	10.2
2	8.7	8.3	7.8	7.9	7.5	7.0	9.1	11.6	13.0	13.4	12.0	11.4	11.3	11.5	11.7	11.9	11.6	11.5	11.0	9.7	9.0	10.4	11.2	10.5	10.4
3	9.4	8.8	6.4	5.4	6.0	5.9	8.0	11.2	12.8	13.8	13.5	12.0	11.3	11.2	11.5	11.2	11.5	12.0	12.2	11.6	11.5	11.7	11.3	10.5	10.4
4	9.6	8.0	7.1	7.0	6.1	4.4	7.5	11.1	12.6	13.6	14.0	13.0	13.5	13.4	13.5	12.8	13.0	12.5	12.0	11.0	9.5	p12.0	p12.4	p12.0	10.9
5	p9.2	p8.2	p9.1	6.7	5.7	3.8	7.5	10.7	12.4	12.6	11.9	11.3	11.5	11.9	12.2	12.7	12.5	11.9	11.2	12.0	p12.0	p12.0	p12.0	p10.7	10.5
6	9.0	7.7	6.8	6.5	5.8	4.8	7.5	10.3	11.7	10.8	10.7	10.4	10.9	11.5	12.1	12.6	13.4	13.0	12.6	10.5	p13.0	p11.0	9.0	p11.5	10.1
7	p11.2	9.2	8.8	6.5	5.5	5.0	7.4	10.4	11.6	12.0	12.4	11.8	11.8	11.9	12.6	12.4	13.1	12.5	11.9	12.4	12.3	11.5	12.2	13.0	10.8
8	10.6	9.3	9.4	9.6	9.2	8.7	10.5	13.8	13.9	14.0	12.8	11.5	11.7	12.0	12.4	12.7	12.7	12.6	12.5	11.2	p13.0	p13.0	p12.3	10.7	11.7
9	11.3	9.3	8.8	8.4	6.7	4.7	7.9	11.2	12.7	13.0	11.9	11.5	12.0	12.4	12.7	12.8	13.0	13.0	12.0	10.9	8.9	p12.2	9.7	10.0	10.7
10	9.4	7.1	5.9	4.7	3.8	2.6	7.2	10.4	12.4	12.4	10.6	10.7	11.2	11.7	12.0	12.4	12.7	12.7	12.7	11.3	p13.1	p13.0	p13.0	p13.0	10.2
11	p12.7	p10.0	7.8	6.7	6.2	5.1	7.9	10.8	12.6	12.8	11.1	10.6	11.2	11.7	12.4	13.0	13.1	12.9	12.9	11.9	p12.5	p12.4	p12.8	p11.9	11.0
12	p11.9	7.7	7.1	7.5	5.2	4.2	7.7	10.7	12.7	12.8	10.1	9.7	10.0	10.0	11.0	11.5	11.6	11.7	11.8	11.0	p12.5	p12.5	p12.8	p13.1	10.3
13	p12.5	p11.0	7.1	p6.3	p6.0	5.0	7.9	10.6	13.0	13.0	12.5	10.5	10.2	10.1	10.8	11.5	11.8	12.3	12.5	11.1	p13.0	9.7	9.9	p11.7	10.4
14	9.6	7.8	6.7	6.2	5.5	4.4	7.7	10.4	12.0	13.0	13.0	12.5	11.2	10.5	10.3	10.5	10.9	11.5	11.5	10.3	p12.7	p12.2	9.1	8.9	9.9
15	8.8	8.3	6.1	p7.2	3.9	p3.2	7.1	9.9	11.5	12.5	13.1	12.5	11.2	10.4	9.8	10.4	10.5	10.8	10.7	9.6	8.5	p12.5	p11.9	p8.9	9.6
16	9.0	7.7	p7.5	6.7	7.3	6.2	9.0	11.3	12.9	13.1	13.7	12.9	12.8	12.5	11.7	11.2	11.5	11.7	11.5	10.9	10.6	12.0	12.6	13.5	10.8
17	11.5	10.5	5.6	4.5	3.3	3.2	7.6	10.3	12.2	12.8	13.4	12.7	12.5	12.2	12.0	12.3	12.5	12.2	11.7	10.8	9.9	p12.5	p13.0	p12.8	10.5
18	p12.5	p10.8	p9.2	8.1	8.0	6.3	8.1	10.7	12.3	13.0	12.8	12.1	11.8	11.6	11.7	12.0	12.2	11.6	10.7	9.3	9.1	p12.8	10.1	10.2	10.7
19	10.2	9.6	9.6	11.2	10.8	8.5	9.8	12.0	12.8	13.0	12.8	13.3	12.3	12.5	12.9	12.8	12.5	12.1	11.6	10.4	10.0	10.2	9.9	p11.6	11.4
20	p12.0	8.4	7.4	8.6	p9.9	8.1	10.0	12.0	13.1	13.4	12.4	11.8	12.0	12.2	12.7	12.5	12.7	12.6	11.9	11.2	10.0	10.7	p11.9	p12.5	11.2
21	11.9	10.1	8.0	7.0	6.4	5.3	8.3	11.0	12.1	12.6	11.3	10.8	10.6	11.1	11.8	12.7	12.8	12.5	12.1	10.3	8.5	p9.0	p8.4	p9.0	10.2
22	p8.6	7.0	5.8	5.5	4.7	3.9	7.8	10.5	12.4	12.6	10.4	9.8	10.2	10.8	11.8	12.2	12.0	12.5	11.2	10.5	9.9	9.8	10.3	10.5	9.6
23	9.6	7.2	5.7	5.0	4.4	4.4	8.0	10.5	12.1	13.2	13.2	12.5	11.5	11.2	11.3	11.3	11.3	11.0	10.8	9.9	9.0	8.4	8.6	8.8	9.5
24	8.4	8.0	7.5	7.1	6.0	5.0	8.0	11.0	12.5	13.4	13.3	12.7	12.4	12.2	11.8	11.9	12.2	12.2	12.3	10.5	9.2	9.3	9.9	10.2	10.3
25	9.6	9.0	8.4	7.8	6.8	5.2	8.5	11.1	12.5	13.5	13.4	13.2	12.4	11.7	12.0	12.6	12.6	12.6	12.6	12.1	11.5	11.0	10.2	10.9	10.9
26	10.5	9.6	8.8	8.5	8.0	6.8	9.4	12.5	13.1	12.9	11.1	11.0	10.4	11.2	12.0	12.2	12.1	12.4	12.7	11.8	10.8	11.8	11.9	12.4	11.0
27	11.7	9.3	9.3	9.7	7.7	6.6	10.1	7.0	13.7	14.3	13.7	12.1	11.2	11.0	11.5	12.0	12.4	12.7	12.8	11.5	p13.0	10.6	11.3	11.8	11.1
28	9.8	8.1	7.6	6.2	4.9	5.2	9.5	12.0	13.1	13.9	13.9	13.4	12.6	12.0	11.6	11.7	11.3	11.6	11.9	11.7	11.4	11.0	11.0	12.0	10.7
29	11.6	9.9	8.1	7.4	6.7	4.9	8.5	11.7	13.4	13.7	12.9	12.3	12.2	12.0	11.9	12.5	12.8	12.9	12.8	11.3	9.5	9.1	8.9	9.3	10.7
30	8.6	7.7	7.0	6.0	3.8	3.9	8.4	11.4	13.0	13.8	13.1	11.9	11.3	10.7	10.6	10.7	11.1	11.6	11.7	11.0	9.0	8.5	p10.0	p10.5	9.8
31	p11.9	9.9	8.4	6.0	3.6	4.1	8.4	11.3	12.8	13.7	14.1	14.3	14.4	13.7	13.1	11.8	11.6	11.5	11.5	11.0	10.0	10.0	10.0	9.4	10.7
MEAN*	10.3	8.8	7.7	7.1	6.3	5.4	8.4	11.0	12.6	13.1	12.5	11.9	11.6	11.6	11.8	12.0	12.1	12.1	11.8	10.9	10.7	11.0	10.9	11.0	10.5

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 40

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1938 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — OCTOBER 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	260	250	290	290	270	230	260	240	260	260	280	290	270	270	290	290	260	270	320	380	310	270	240	230	274
2	230	240	250	250	240	230	250	240	250	260	280	280	280	230	280	280	260	270	320	420	340	250	210	210	267
3	220	210	240	270	260	230	250	250	260	270	280	280	280	280	280	270	250	270	300	350	270	230	230	220	260
4	230	240	250	230	220	230	250	240	260	280	270	270	280	270	280	280	250	270	310	380	400	320	250	240	271
5	210	240	250	230	230	230	260	250	270	260	280	280	280	280	260	280	270	260	310	410	370	320	270	260	273
6	210	220	240	230	220	220	250	250	270	270	300	290	280	320	280	260	240	260	300	400	390	300	290	280	274
7	240	240	230	220	230	240	270	250	260	260	280	290	270	300	300	300	250	270	300	280	240	260	250	230	261
8	230	280	320	280	270	220	260	250	260	270	270	230	280	280	290	280	260	260	300	400	490	360	280	240	280
9	230	240	240	220	220	220	250	260	270	270	280	270	290	280	270	270	260	260	310	380	400	300	230	210	268
10	210	240	230	230	240	240	250	260	270	280	280	290	290	290	300	260	260	260	300	380	380	290	250	240	272
11	220	240	240	240	230	230	260	240	270	290	300	270	260	290	280	280	250	260	300	300	320	280	220	210	262
12	220	250	280	270	240	230	250	250	270	260	310	300	300	290	270	260	250	260	300	370	310	250	240	240	270
13	220	250	250	250	240	250	240	260	260	280	290	300	310	290	270	280	240	260	300	360	390	270	250	250	273
14	230	220	260	250	240	240	260	250	270	280	290	250	310	300	280	...b	260	260	300	420	420	310	260	280	...
15	240	220	230	230	240	270	250	260	270	290	300	310	300	320	...b	280	270	260	300	370	390	250	230	220	...
16	230	230	250	260	280	270	250	260	270	280	290	300	300	300	290	270	250	270	300	310	240	200	240	240	266
17	210	220	240	220	240	260	260	240	260	280	280	300	290	280	280	260	260	270	300	400	400	330	320	280	278
18	270	220	230	230	220	230	260	270	270	290	290	280	280	280	290	300	250	280	300	390	350	300	240	240	273
19	240	240	280	260	220	220	250	260	270	280	290	280	300	280	290	300	270	270	300	350	360	300	290	270	278
20	200	230	250	270	280	290	250	260	270	290	280	290	290	300	280	260	270	260	300	390	350	320	300	260	281
21	220	220	240	230	220	230	250	260	270	280	300	300	290	280	280	300	240	260	300	380	400	350	300	270	274
22	210	230	240	240	230	230	250	260	270	290	290	300	300	300	290	280	270	260	290	350	320	270	230	230	268
23	210	240	240	240	240	230	250	260	260	280	300	280	300	280	270	300	250	260	300	380	380	360	270	270	277
24	240	240	240	240	220	240	250	260	260	280	290	290	300	290	270	270	270	260	300	390	350	280	260	260	273
25	250	240	250	240	250	240	250	240	260	270	270	280	280	280	280	260	260	270	300	350	350	310	300	280	273
26	280	280	280	260	210	220	250	250	260	280	280	290	290	280	280	270	260	260	280	360	350	280	280	270	275
27	250	250	270	240	230	250	250	250	250	270	270	280	290	290	280	270	280	260	300	410	410	310	280	240	278
28	220	250	240	280	230	250	250	260	260	270	270	270	270	270	280	270	260	260	300	350	320	320	290	250	270
29	230	230	250	230	230	230	250	260	260	270	270	280	290	280	280	260	270	270	300	400	410	410	290	260	280
30	240	230	230	230	220	250	250	260	270	270	280	280	280	270	280	280	280	270	300	400	480	400	350	300	288
31	240	220	220	220	230	250	250	260	270	270	270	290	290	290	270	270	280	260	300	400	400	340	310	280	278
MEAN*	230	237	250	245	237	239	253	254	265	275	284	285	288	287	281	276	260	264	301	374	364	301	266	250	274

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 41

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1938 OCTOBER 1938

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION													MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	5.2	5.3	5.6	5.7	5.6	5.4	5.4	5.4	4.1	...	...	...	...	230	230	220	220	210	200	210	220	240	...	...
2	...	...	5.0	5.2	5.6	5.5	5.5	5.5	5.4	5.4	4.0	...	...	...	...	230	230	210	220	200	210	220	230	230	...	...
3	...	...	5.0	5.2	5.5	5.5	5.6	5.4	5.4	4.9	...	...	...	...	...	230	230	220	220	200	200	210	220	...	...	...
4	...	...	4.9	5.4	5.5	5.4	5.6	5.6	5.3	5.2	...	...	...	...	...	...b	220	230	210	210	200	210	240	...	...	...
5	...	...	5.0	5.0	5.5	5.3	5.5	5.4	5.0	5.2	4.3	...	...	...	...	230	220	220	210	210	210	220	230	240	...	...
6	...	...	5.0	5.3	5.8	5.6	5.5	5.8	5.2	4.7	...	...	...	...	...	230	220	220	210	210	200	210	230	...	...	...
7	...	...	4.5	5.0	5.3	5.5	5.4	5.5	5.6	5.5	...	...	...	...	...	240	220	220	...b	210	200	230	240	...	...	...
8	...	4.5	5.0	5.3	5.5	5.6	5.5	5.6	5.6	5.3	4.0	...	...	...	240	240	220	220	220	210	210	230	220	240	...	...
9	...	4.5	5.2	5.3	5.6	5.4	5.8	5.5	5.2	4.9	4.0	...	...	...	240	230	210	210	200	200	200	220	230	240	...	...
10	...	4.8	4.9	5.4	5.5	5.8	5.4	5.4	5.4	4.5	4.0	...	...	...	240	230	220	210	205	210	210	220	220	230	...	...
11	...	...	4.9	5.4	5.8	5.3	5.1	5.5	5.3	5.0	...	...	...	...	...	230	220	220	210	200	220	220	220	...	...	...
12	...	4.5	5.0	5.0	5.7	5.6	5.5	5.2	5.0	5.5	...	...	...	...	230	230	210	200	200	200	210	200	200	...	...	...
13	...	4.5	4.8	5.3	5.3	5.5	5.5	5.3	5.0	4.8	...	...	...	...	240	230	220	210	200	200	200	200	210	...	...	...
14	...	4.5	4.9	5.3	5.4	5.5	5.5	5.4	5.2	...b	4.0	...	...	...	240	230	200	200	210	210	200	200	...b	230	...	...
15	...	4.0	5.0	5.4	5.6	5.5	5.6	5.4	...b	4.9	4.0	...	...	...	240	230	220	230	220	210	210	...b	200	220	...	...
16	...	4.5	5.0	5.3	5.4	5.6	5.5	5.4	5.2	4.6	...	...	...	...	240	230	230	230	220	210	200	210	220	...	...	...
17	...	4.6	...b	5.4	5.4	5.6	5.5	5.4	5.1	4.5	...	...	...	...	240	...b	230	220	210	210	200	220	220	...	...	...
18	...	4.7	5.0	5.3	5.4	5.4	5.5	5.2	5.3	5.3	...	...	...	...	240	220	220	210	200	210	200	210	230	...	...	...
19	...	4.5	5.1	5.3	5.4	5.6	5.5	5.3	5.5	5.4	4.3	...	...	...	240	230	220	210	210	210	200	210	220	240	...	...
20	...	4.5	4.9	5.3	5.4	5.6	5.6	5.6	5.0	4.6	3.8	...	...	...	240	230	210	210	220	210	210	210	230	240	...	...
21	...	4.8	5.1	5.5	5.7	5.6	5.5	5.4	5.2	5.1	...	...	...	...	240	220	220	200	200	200	200	210	230	...	...	...
22	...	4.5	5.1	5.4	5.4	5.6	5.5	5.5	5.3	4.9	4.4	...	...	...	230	220	220	210	200	200	200	200	230	240	...	...
23	...	4.6	4.8	5.3	5.6	5.4	5.5	5.3	5.0	5.2	...	...	...	...	240	230	220	220	210	210	200	200	210	...	...	...
24	...	4.5	4.7	5.4	5.4	5.5	5.6	5.4	4.8	4.7	4.4	...	...	...	240	230	220	210	210	200	210	200	220	250	...	...
25	...	...	4.7	5.2	5.3	5.3	5.4	5.3	5.0	4.6	4.2	...	...	...	...	230	230	210	210	200	210	...b	230	240	...	...
26	...	4.0	4.9	5.5	5.5	5.6	5.6	5.5	5.4	4.8	4.2	...	...	...	230	230	220	210	210	200	200	210	220	240	...	...
27	...	...	5.0	5.3	5.4	5.5	5.6	5.5	5.3	5.0	5.0	...	...	...	...	220	210	210	210	210	210	210	230	240	...	...
28	...	4.7	5.2	5.3	5.4	5.4	5.4	5.4	5.4	4.9	4.5	...	...	...	240	230	220	220	210	210	210	210	230	240	...	...
29	...	4.5	5.1	5.3	5.4	5.6	5.7	5.5	5.4	4.9	4.5	...	...	...	240	230	220	210	210	200	210	210	230	250	...	...
30	...	4.8	5.0	5.3	5.5	5.5	5.5	5.4	5.4	5.0	4.7	...	...	...	240	230	220	220	210	200	200	200	220	250	...	...
31	...	4.6	5.1	5.4	5.5	5.8	5.8	5.6	5.3	5.0	4.5	...	...	...	240	230	220	220	210	210	200	200	210	240	...	...
MEAN*	...	4.5	5.0	5.3	5.5	5.5	5.5	5.4	5.2	5.0	4.3	...	...	...	238	229	220	215	210	206	204	211	223	239	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 42

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1938

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	1.2	1.4	2.1	2.2	2.3	2.2	2.2	2.3	2.0	1.3	1.2	1.1	2.1	3.0	3.7	3.8	4.0	4.2	4.2	4.1	4.0	3.6	3.1	2.5	1.4
2	1.2	1.2	1.4	2.8	1.8	2.0	2.1	1.8	1.9	1.5	1.2	1.2	0.6	2.5	2.9	3.5	3.8	4.0	4.1	4.2	4.1	3.9	3.6	2.4	2.4	1.3
3	1.1	1.2	1.4	1.8	1.8	2.0	2.4	2.2	2.0	1.9	1.8	1.8	1.2	2.0	2.9	3.4	3.8	4.0	4.2	4.2	4.0	3.8	3.6	3.2	2.5	1.4
4	1.1	1.3	p4.0	2.3	2.4	2.4	2.4	2.6	2.3	3.4	2.3	1.2	1.2	2.2	3.0	...b	3.8	4.2	4.3	4.2	4.2	3.9	3.9	3.3	2.5	1.4
5	1.1	1.2	2.0	2.3	2.3	2.3	2.4	3.4	2.5	2.2	2.0	1.2	1.1	2.1	3.0	3.5	3.8	4.0	4.2	4.2	4.3	3.9	3.6	3.2	2.4	1.4
6	1.2	1.2	2.0	2.3	2.5	2.3	2.4	2.3	2.5	2.1	1.3	1.2	1.1	2.2	3.0	3.4	3.8	4.2	4.2	4.2	4.1	4.0	3.5	3.0	2.4	1.4
7	1.1	1.3	2.0	2.1	2.4	4.7	2.5	2.5	2.3	2.2	1.2	1.2	1.0	2.1	3.0	3.4	3.7	4.0	...b	4.1	4.1	3.8	3.6	3.0	2.4	1.2
8	1.2	1.4	2.0	2.1	2.3	2.3	2.3	2.3	2.4	2.1	2.1	1.2	1.1	2.1	3.0	3.3	3.8	4.0	4.2	4.2	4.1	3.9	3.5	3.2	2.4	1.4
9	1.2	1.2	1.3	2.0	2.2	2.2	2.3	2.3	2.3	2.2	1.2	1.2	1.2	2.1	2.9	3.5	3.8	4.0	4.0	4.1	4.0	3.8	3.6	3.1	2.3	1.2
10	1.2	1.2	2.1	2.0	2.2	2.2	2.2	2.2	2.2	2.1	1.3	1.2	0.6	2.2	2.9	3.6	3.7	3.9	4.1	4.0	4.0	3.8	3.6	3.0	2.4	1.3
11	1.2	1.2	1.4	2.1	2.2	2.3	2.3	2.3	2.5	2.2	1.2	1.2	0.6	2.4	3.0	3.5	3.7	3.9	3.9	4.0	4.0	3.8	3.6	3.1	2.3	1.2
12	0.5	1.2	1.3	2.2	2.4	2.3	2.4	2.3	2.2	2.1	2.1	1.2	1.1	2.1	2.9	3.5	3.8	4.0	4.1	4.1	4.0	3.8	3.6	3.2	2.4	1.4
13	1.2	1.4	2.1	2.2	2.2	2.4	2.4	2.3	1.9	1.8	1.7	1.2	0.7	2.2	2.9	3.6	3.8	3.9	4.1	4.2	4.0	3.8	3.6	3.0	2.3	1.4
14	1.2	2.0	2.2	2.3	2.2	2.5	2.4	2.3	2.4	p4.7	2.0	1.8	1.1	2.2	2.9	3.6	3.8	3.9	4.3	4.1	4.0	3.8	...b	3.1	2.6	1.4
15	1.2	1.3	2.2	2.2	2.3	2.4	2.4	2.3	p5.8	2.2	1.7	1.2	1.1	2.2	3.0	3.5	3.8	4.0	4.2	4.1	4.0	...b	3.6	3.1	2.4	1.2
16	1.2	1.3	2.1	2.3	2.4	2.3	2.4	2.3	2.3	2.0	2.0	1.2	1.1	2.2	3.0	3.5	3.8	3.9	4.0	4.1	4.0	3.8	3.6	3.2	2.4	1.2
17	1.0	1.3	3.0	2.5	2.4	2.4	2.4	2.4	2.2	2.1	1.3	1.2	1.1	2.2	3.0	3.7	3.9	4.1	4.3	4.2	4.0	3.8	3.6	3.7	2.5	1.4
18	0.6	2.7	2.9	3.3	3.0	...c	...c	...c	...c	...c	1.5	1.2	1.1	...c	...c	3.5	3.8	4.0	4.0	4.1	4.0	3.8	3.7	...c	1.2	1.5
19	1.0	1.2	1.2	3.6	3.6	2.4	2.5	2.3	2.3	2.0	1.4	1.2	0.6	...c	...c	3.5	4.1	4.0	4.2	4.1	4.0	3.9	3.6	3.0	2.4	1.2
20	1.1	1.1	2.0	2.1	2.2	3.6	2.3	2.4	2.3	2.2	2.0	1.2	1.1	2.2	2.9	3.5	3.7	3.9	4.0	4.2	4.0	3.9	3.7	3.2	2.4	1.4
21	1.2	1.0	2.4	2.1	2.2	3.2	2.0	2.0	1.9	1.8	1.4	1.2	0.8	2.3	2.9	3.4	3.8	3.9	4.1	4.1	4.0	3.8	3.6	2.9	2.4	1.4
22	1.0	1.2	1.4	2.1	2.1	2.2	2.2	2.2	2.1	2.0	1.3	1.2	1.1	2.2	2.9	3.4	3.7	4.0	4.1	4.0	4.0	3.8	3.5	3.1	2.3	1.2
23	1.2	1.2	1.5	2.2	2.2	2.3	2.3	2.2	2.2	2.0	1.4	1.2	1.1	2.2	3.0	3.6	3.8	4.0	4.0	4.1	4.0	3.8	3.5	3.0	2.4	1.4
24	1.2	1.3	1.9	2.1	2.2	2.3	2.3	2.2	2.1	2.0	1.8	1.2	1.0	2.2	3.0	3.5	3.8	3.9	4.2	4.3	4.0	3.8	3.6	3.0	2.4	1.2
25	1.1	1.2	2.0	2.1	2.2	2.3	2.1	2.2	p4.7b	2.1	1.3	1.2	1.1	2.2	2.9	3.5	4.0	4.0	4.1	4.1	4.1	...b	3.6	3.1	2.5	1.4
26	1.2	1.4	2.0	2.0	2.2	2.4	2.3	2.3	2.2	2.0	1.2	0.8	1.1	2.3	3.0	3.6	3.8	4.0	4.3	4.3	4.2	3.9	3.5	3.1	2.4	1.4
27	1.2	1.3	2.1	2.0	2.2	2.2	2.2	2.2	2.1	2.1	1.2	1.2	0.8	2.3	3.0	3.6	3.8	4.0	4.1	4.2	4.0	3.8	3.6	3.1	2.4	1.4
28	1.2	1.3	2.0	2.0	2.0	2.2	3.0	2.0	2.1	2.0	1.8	1.2	1.1	2.4	3.0	3.6	3.8	4.0	4.2	4.3	4.1	4.0	3.7	3.3	2.5	1.4
29	1.2	1.9	2.0	2.1	2.2	2.1	2.2	2.2	2.2	2.0	1.2	1.2	1.1	2.4	3.1	3.6	3.9	4.1	4.3	4.3	4.2	4.0	3.7	3.4	2.5	1.4
30	1.2	1.3	2.0	2.1	2.2	2.2	2.3	2.2	2.2	2.0	1.4	1.2	1.0	2.4	3.1	3.6	3.9	4.2	4.3	4.4	4.2	4.0	3.7	3.2	2.6	1.4
31	1.2	1.3	2.1	2.2	2.2	2.3	2.2	2.2	2.1	2.0	1.2	1.2	0.8	2.3	3.1	3.7	3.9	4.2	4.3	4.3	4.2	3.9	3.6	3.2	2.5	1.4
* MEAN	1.1	1.4	1.9	2.2	2.3	2.4	2.3	2.3	2.2	2.1	1.5	1.2	1.0	2.2	3.0	3.5	3.8	4.0	4.2	4.2	4.1	3.9	3.6	3.1	2.4	1.3

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 43

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1938 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — NOVEMBER 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	8.6	8.6	8.2	7.9	4.8	4.2	4.5	11.1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
2	...c	...c	...c	...c	...c	...c	...c	...c	14.0	13.7	14.0	13.5	13.2	13.3	12.8	11.6	9.9	9.8	9.4	8.5	8.5	9.0	8.7	8.6	...
3	8.2	8.1	7.8	7.1	5.4	4.5	8.5	11.4	13.1	13.7	13.4	13.1	13.1	13.0	12.6	12.5	12.1	11.8	11.7	11.4	10.2	p13.0	p11.9	p11.9	10.8
4	p11.9	9.0	8.0	7.3	6.0	4.6	8.5	11.4	13.0	13.8	13.5	12.5	11.7	11.9	11.8	11.9	11.9	11.5	10.9	10.0	10.0	11.0	11.5	11.2	10.6
5	10.5	10.2	9.0	5.8	3.5	4.1	8.2	11.5	13.4	13.9	13.5	13.2	12.7	13.0	13.4	13.8	13.7	13.6	13.6	12.6	p13.0	p12.8	p11.8	p10.8	11.3
6	p12.0	p9.5	8.7	8.3	6.8	6.0	9.2	10.7	13.2	13.6	13.0	11.8	11.3	11.6	11.7	11.7	11.8	11.4	10.5	8.8	p12.2	p11.8	p12.0	p8.5	10.7
7	p8.5	p7.2	p7.1	6.4	6.4	5.6	8.8	11.6	13.5	14.2	14.7	15.5	15.4	14.0	13.8	13.6	13.2	13.2	13.1	12.5	10.5	8.9	8.4	8.3	11.0
8	8.5	8.9	8.2	7.6	6.3	5.2	8.8	11.8	13.2	13.8	13.9	14.2	13.6	13.6	13.7	13.5	12.8	11.0	11.0	9.7	8.8	8.0	7.9	8.0	10.5
9	8.3	8.3	8.3	7.6	7.1	8.3	10.3	13.3	14.0	15.7	15.3	15.3	14.0	13.3	13.4	13.4	13.9	14.0	13.9	12.9	11.1	10.0	10.0	10.1	11.7
10	9.6	8.9	8.7	8.5	6.9	5.7	9.4	12.3	13.6	13.8	13.9	12.7	11.8	11.7	11.7	11.8	12.4	12.8	13.2	12.7	11.4	10.4	10.0	9.9	11.0
11	9.6	p10.4	p9.3	7.8	6.3	5.0	8.9	11.3	12.7	14.0	14.2	13.8	12.4	11.8	11.5	11.1	11.2	11.5	11.7	11.2	9.4	p12.6	p10.5	p10.0	10.8
12	p10.5	7.8	6.8	6.0	5.2	4.6	8.5	11.0	12.5	13.6	13.6	12.8	12.1	11.4	11.4	11.8	11.7	12.0	11.8	10.6	9.0	p12.5	p12.0	p11.9	10.5
13	p12.0	p10.1	6.6	6.0	5.2	5.2	8.5	11.1	12.4	13.5	...b	13.7	12.2	10.5	10.3	10.5	11.3	12.0	12.0	11.7	10.0	9.1	p9.2	p9.0	...
14	p8.4	p7.6	6.2	5.2	5.0	4.8	8.4	11.0	12.4	13.1	14.0	13.8	13.0	12.0	10.4	10.5	10.4	10.7	10.5	10.7	8.7	8.9	9.6	9.9	9.8
15	8.9	7.8	9.7	6.6	5.8	6.5	9.7	11.2	12.1	13.0	13.1	13.5	14.0	13.9	14.7	14.0	13.6	12.6	12.0	10.7	10.1	10.2	11.5	11.9	11.0
16	10.9	7.8	5.4	4.5	3.6	4.7	8.8	10.9	12.1	12.7	13.4	13.7	13.8	13.8	14.0	13.8	13.0	12.9	12.5	11.5	10.5	9.7	9.6	8.4	10.5
17	p11.5	p10.0	8.6	8.1	7.0	5.8	9.0	11.7	13.2	13.0	12.5	12.4	12.4	12.4	11.9	11.8	10.8	9.5	10.4	10.4	9.2	9.6	9.4	8.6	10.4
18	7.9	7.9	8.0	8.0	7.7	7.1	10.0	12.0	12.3	13.2	12.7	13.8	13.9	13.7	13.1	13.0	11.9	11.7	11.7	10.9	9.4	8.6	p9.0	p8.4	10.7
19	p9.0	p10.3	8.3	7.0	4.9	4.3	8.4	11.0	12.8	13.6	13.0	12.0	11.5	11.5	11.6	11.7	11.9	12.0	12.1	11.5	10.1	8.5	p9.5	p9.8	10.3
20	p9.5	p10.0	p11.7	p8.7	7.2	5.9	9.0	11.5	12.7	13.6	13.3	13.3	13.1	13.4	13.4	13.7	13.6	13.4	12.9	12.6	10.9	p10.9	p10.9	p10.5	11.5
21	p10.8	p10.2	8.0	7.1	5.3	4.2	8.2	11.1	13.3	13.5	13.3	13.7	13.8	13.7	12.8	12.6	12.3	12.1	12.1	11.9	11.4	11.2	11.2	11.2	11.0
22	9.8	p12.0	p11.8	p9.1	8.1	8.4	10.8	12.7	13.8	14.1	14.3	13.7	12.8	12.0	11.9	11.6	12.0	11.7	11.4	10.7	10.0	8.6	p9.8	p9.9	11.3
23	p10.8	p8.5	p6.4	p7.5	6.1	6.0	9.6	11.9	13.0	13.3	13.4	12.9	13.1	13.7	13.8	14.2	14.3	14.1	13.9	12.9	11.7	p12.0	p11.8	p11.9	11.5
24	p12.2	8.7	6.6	5.6	5.0	4.6	8.5	11.1	12.7	13.1	12.0	11.3	10.4	10.7	11.6	11.8	11.9	12.0	11.4	10.6	10.9	10.7	10.7	10.4	10.2
25	10.0	9.1	8.4	7.1	6.0	5.3	8.9	11.9	13.1	13.8	14.3	13.7	13.1	12.5	12.8	12.8	12.6	12.5	11.8	11.3	10.3	9.2	8.2	7.7	10.7
26	p9.0	p9.0	7.4	5.8	6.3	7.3	9.1	11.3	13.1	13.6	13.5	13.5	13.2	12.8	12.0	12.5	11.5	10.1	10.0	9.9	9.4	9.4	9.0	8.8	10.3
27	7.9	p10.0	p10.2	10.0	p7.8	8.0	10.3	12.5	13.1	13.2	13.4	13.6	13.5	13.2	12.0	11.5	10.8	10.7	10.2	10.0	8.6	p10.9	8.9	9.0	10.8
28	p9.2	p10.4	p11.8	p11.8	p8.8	5.1	8.4	11.1	12.4	12.2	13.0	13.3	13.2	13.5	13.0	13.4	12.5	11.8	11.5	11.0	9.0	p9.0	p8.7	p9.0	11.0
29	p9.0	p10.3	p9.6	p11.1	p8.2	p7.3	9.1	11.5	12.7	13.6	13.7	13.5	12.8	...b	12.6	12.5	12.2	11.5	10.5	9.2	8.3	7.5	7.3	7.1	...
30	6.7	6.0	5.8	6.0	5.4	5.0	8.4	10.6	12.3	13.4	13.4	13.4	13.4	13.7	13.7	13.2	13.7	13.5	12.8	11.4	8.8	9.0	9.3	p10.1	10.4
31																									
MEAN*	9.6	9.1	8.2	7.4	6.1	5.6	8.8	11.5	13.0	13.6	13.6	13.4	12.9	12.7	12.5	12.5	12.2	12.0	11.7	11.0	10.0	10.1	9.9	9.7	10.7

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 44

NOVEMBER 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1938

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	250	230	220	210	210	250	250	260	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
2	...c	...c	...c	...c	...c	...c	...c	...c	280	280	270	280	300	270	280	270	260	300	380	400	380	270	260	250	...
3	230	240	240	230	220	250	250	270	270	270	270	280	280	270	270	260	260	250	300	390	420	420	240	300	278
4	270	240	240	230	220	240	250	260	270	270	270	280	280	280	260	260	250	270	300	390	450	330	300	270	278
5	250	230	220	210	220	240	250	260	280	280	280	280	280	270	280	270	260	270	300	390	440	430	400	330	288
6	300	270	250	230	220	250	260	260	270	270	260	280	280	280	280	260	270	270	310	450	360	310	270	250	280
7	250	250	250	250	220	250	250	260	270	270	270	300	280	280	270	280	280	270	300	400	400	390	280	300	284
8	270	230	240	240	220	250	250	260	270	270	270	280	290	280	280	260	270	270	300	390	390	380	340	300	283
9	250	230	240	260	300	320	260	260	260	260	270	280	280	270	270	280	270	270	300	400	400	350	310	300	287
10	250	230	230	220	230	230	250	260	260	270	270	280	280	280	280	260	260	270	290	340	380	350	300	290	273
11	270	260	240	220	230	240	250	260	270	270	280	280	280	290	270	280	260	260	290	380	380	350	270	290	278
12	250	220	230	230	240	250	250	260	270	280	280	290	290	280	290	280	270	270	290	400	410	430	330	300	287
13	230	230	250	250	250	250	250	250	260	...b	290	300	290	280	280	270	250	260	290	360	380	350	360	300	...
14	250	230	230	240	250	260	260	260	270	280	290	310	300	310	290	300	280	270	320	390	350	280	230	220	278
15	230	240	250	250	250	270	250	250	270	270	280	290	290	300	350	300	260	270	290	360	350	300	270	220	278
16	210	220	230	230	250	270	250	260	260	280	280	280	300	280	280	300	260	270	300	320	350	320	320	290	275
17	270	250	250	250	250	240	260	260	270	280	270	280	290	290	280	270	270	270	290	330	320	260	230	240	270
18	250	250	250	230	230	250	260	250	270	270	280	290	310	290	290	270	260	260	290	370	450	380	400	350	292
19	280	230	230	220	230	250	250	260	280	290	280	280	280	290	280	270	270	270	300	340	390	410	450	400	293
20	340	300	290	240	220	230	250	270	270	280	280	280	280	290	270	270	270	260	300	350	300	400	400	350	291
21	300	270	230	220	210	240	250	260	270	280	280	280	290	290	280	280	280	260	280	310	330	310	310	320	276
22	380	370	330	260	250	250	250	260	260	280	290	280	280	280	270	280	280	270	300	380	400	460	450	460	315
23	450	420	390	250	230	250	250	260	260	280	280	280	290	300	290	260	270	260	280	330	380	350	300	260	299
24	240	220	240	250	240	260	260	260	280	270	290	270	280	290	280	280	260	270	300	350	360	320	290	280	277
25	240	240	240	240	230	260	260	260	270	270	270	280	280	280	280	270	260	270	300	380	400	410	440	420	294
26	360	280	220	230	290	290	260	260	270	270	290	330	270	280	390	290	280	280	290	350	360	340	350	340	299
27	340	340	340	320	260	250	250	260	270	260	280	280	280	280	270	270	280	260	290	330	330	310	301	320	290
28	290	270	250	250	220	250	250	260	270	270	280	300	290	290	...b	280	270	260	290	360	400	400	350	310	...
29	300	300	300	260	230	250	260	270	280	300	290	290	300	...b	...b	260	240	260	290	370	390	380	330	290	...
30	280	240	250	230	230	260	260	260	260	280	290	300	310	280	350	300	270	270	290	340	360	300	280	310	283
31																									
MEAN*	279	260	254	240	236	254	254	260	269	275	279	287	287	284	288	275	266	268	298	367	380	355	323	306	285

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 45

NOVEMBER 1938 | NOVEMBER 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	5.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
2	...	...	5.8	5.8	5.6	5.6	5.8	5.4	5.2	4.4	...	...	...
3	...	4.8	5.2	5.4	5.5	5.7	5.6	5.5	5.4	4.6	4.2	...	...
4	...	4.8	5.2	5.4	5.5	5.6	5.6	5.5	5.0	4.7	...	...	...
5	...	4.3	5.3	5.5	5.5	5.6	5.6	5.4	5.4	4.9	4.4	...	...
6	...	4.8	5.1	5.3	5.3	5.5	5.6	5.5	5.4	4.8	4.3	...	...
7	...	4.7	5.3	5.2	5.5	6.0	5.4	5.5	5.3	4.9	4.6	...	...
8	...	4.5	5.2	5.2	5.3	5.6	5.7	5.5	5.3	4.6	4.3	...	...
9	...	5.0	5.0	5.1	5.3	5.4	5.5	5.3	5.1	4.8	4.3	...	...
10	...	4.5	5.0	5.2	5.4	5.4	5.5	5.4	5.3	4.5	4.3	...	...
11	...	4.7	5.0	5.2	5.4	5.3	5.3	5.3	5.1	4.7	4.0	...	...
12	...	4.9	5.0	5.4	5.5	5.5	5.5	5.4	5.3	4.8	4.3	...	...
13	...	4.5	4.8	...b	5.5	5.7	5.5	5.4	5.2	4.5	...	...	...
14	...	4.1	5.0	5.3	5.6	5.7	5.6	5.6	5.2	5.6	4.3	...	...
15	...	4.5	5.0	5.1	5.5	5.6	5.6	5.7	6.1	5.5	4.0	...	...
16	...	4.7	5.0	5.4	5.5	5.6	5.8	5.6	5.4	5.4	...	...	...
17	...	4.5	5.0	5.5	5.4	5.5	5.6	5.4	4.9	4.6	4.4	...	...
18	...	5.0	5.2	5.2	5.5	5.6	5.8	5.6	5.6	4.6	4.0	...	...
19	...	4.7	5.2	5.5	5.4	5.4	5.5	5.5	5.2	4.6	4.5	...	...
20	...	4.9	5.0	5.4	5.4	5.4	5.6	5.5	5.0	4.6	4.4	...	...
21	...	4.6	5.2	5.4	5.5	5.6	5.6	5.5	5.4	4.8	4.5	...	...
22	...	5.0	5.3	5.4	5.5	5.4	5.3	5.4	5.2	4.9	4.5	...	...
23	...	5.1	5.0	5.3	5.5	5.5	5.6	5.5	5.5	4.7	4.4	...	...
24	...	4.1	5.4	5.3	5.6	5.5	5.4	5.3	5.3	5.0	4.4	...	...
25	...	4.8	5.2	5.3	5.4	5.6	5.4	5.4	5.3	5.0	4.3	...	...
26	...	4.8	5.4	5.4	5.8	6.1	5.3	5.5	...b	5.4	5.0	...	...
27	...	5.1	5.0	5.2	...b	5.3	5.5	5.5	5.4	5.0	4.5	...	...
28	...	5.0	5.2	5.3	5.5	5.8	5.6	5.6	...b	4.9	4.6	...	...
29	...	5.2	5.5	5.7	5.6	5.6	5.6	...b	...b	4.6	...	...	...
30	...	4.5	4.6	5.5	5.6	5.6	5.6	5.3	5.5	5.2	4.3	...	...
31													
* MEAN	...	4.7	5.1	5.4	5.5	5.6	5.6	5.5	5.3	4.8	4.4	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...c	240	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
2	...	...	220	220	210	200	210	200	220	240	...	...	...
3	...	240	240	220	210	200	200	200	210	240	240	...	...
4	...	240	230	230	220	220	200	200	210	230	...	...	...
5	...	240	220	220	210	210	200	200	200	210	240	...	...
6	...	240	230	220	210	210	200	210	210	220	240	...	...
7	...	230	230	230	210	210	210	210	210	230	250	...	...
8	...	240	230	230	220	220	210	210	210	230	250	...	...
9	...	240	230	230	210	210	210	210	210	230	240	...	...
10	...	240	230	230	220	210	210	200	200	210	240	...	...
11	...	250	230	230	210	210	210	210	220	210	240	...	...
12	...	240	230	230	210	210	210	200	200	240	240	...	...
13	...	230	230	...b	220	210	210	200	190	220	...	...	...
14	...	240	230	220	220	220	210	210	200	220	240	...	...
15	...	240	240	220	220	230	230	220	210	200	240	...	...
16	...	240	240	230	230	220	240	210	210	220	...	...	...
17	...	240	240	220	210	220	210	210	200	210	240	...	...
18	...	240	240	230	230	230	220	210	200	200	220	...	...
19	...	240	230	220	210	210	210	200	200	210	240	...	...
20	...	250	230	230	220	210	210	210	210	210	230	...	...
21	...	240	230	220	210	210	210	200	200	210	230	...	...
22	...	240	230	220	210	210	210	210	210	210	230	...	...
23	...	240	230	210	200	210	210	200	210	200	230	...	...
24	...	230	230	210	210	210	210	200	210	210	230	...	...
25	...	240	230	...b	220	210	210	210	220	210	230	...	...
26	...	...b	240	230	230	220	220	210	...b	250	250	...	...
27	...	240	230	220	...b	220	210	210	220	270	200	...	...
28	...	240	230	230	220	210	210	210	...b	220	240	...	...
29	...	240	240	220	220	210	...b	...b	...b	210	200	...	...
30	...	240	240	230	230	210	210	210	230	220	200	...	...
31													
* MEAN	...	240	231	224	216	213	211	206	208	221	233	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 46

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1938

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.1	1.2	...c	...e	...c	...c	...c	...c	...c	...c	...c	...c	...c	2.4	3.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
2	...c	...c	2.2	2.2	2.4	2.3	2.2	2.2	1.4	1.2	1.1	1.0	0.8	...c	...c	4.0	4.1	4.2	4.3	4.2	3.9	3.6	3.2	2.5	1.4	0.8
3	1.2	1.2	2.1	2.0	2.2	2.3	2.3	2.3	2.2	2.1	2.1	1.2	1.0	2.5	3.1	3.8	3.9	4.0	4.1	4.3	4.1	3.9	3.7	3.1	2.5	1.4
4	1.1	2.1	2.0	2.1	2.2	2.3	2.3	2.2	2.1	2.0	1.3	1.2	1.1	2.3	3.0	3.6	3.9	4.1	4.2	4.3	4.1	3.8	3.6	3.2	2.5	1.5
5	1.0	1.3	2.0	2.1	2.1	2.2	2.2	2.2	2.1	2.0	1.4	1.2	1.0	2.4	3.1	3.6	3.9	4.1	4.2	4.2	4.1	3.9	3.6	3.2	2.5	1.5
6	1.2	1.2	2.0	2.1	2.2	2.2	2.2	2.2	2.0	2.0	1.2	0.8	0.6	2.4	3.0	3.5	3.8	4.1	4.2	4.2	4.1	3.9	3.6	3.2	2.5	1.5
7	1.0	1.2	2.0	2.1	2.1	2.2	2.4	2.2	2.2	2.4	2.1	1.8	0.8	2.4	3.1	3.6	3.9	4.0	4.2	4.3	4.1	3.9	3.8	3.4	2.5	1.5
8	1.2	1.2	2.0	2.1	2.2	2.3	2.4	2.2	2.1	1.9	1.2	1.2	0.8	2.4	3.0	3.5	3.8	4.0	4.2	4.3	4.1	3.8	3.6	3.1	2.6	1.6
9	0.8	1.2	1.3	2.1	2.1	2.2	2.2	2.2	2.2	1.3	1.2	0.6	1.0	2.3	3.0	3.5	3.8	4.0	4.2	4.2	4.0	3.8	3.6	3.2	2.5	1.5
10	1.2	1.3	2.4	2.2	2.2	2.2	2.2	2.2	2.1	2.1	1.2	1.2	0.8	2.4	3.0	3.8	3.9	4.0	4.1	4.1	3.9	3.8	3.6	3.2	2.5	1.4
11	1.2	1.3	2.1	2.1	2.2	2.2	3.0	2.1	3.8	2.0	1.3	1.1	1.0	2.5	3.1	3.6	3.9	4.1	4.2	4.4	4.2	4.3	3.7	3.3	2.6	1.4
12	0.5	1.3	2.1	2.2	2.2	2.2	2.2	2.3	2.2	2.2	1.3	1.2	0.6	2.4	3.1	3.7	3.8	3.9	4.1	4.1	4.1	3.9	3.7	3.2	2.4	1.5
13	1.2	1.2	2.0	p4.9	2.2	2.2	2.2	2.2	2.1	2.1	1.2	1.1	0.6	2.4	3.1	3.6	...b	4.2	4.2	4.1	4.0	3.8	3.6	3.2	2.6	1.4
14	1.2	1.3	2.0	2.2	2.2	2.2	2.3	2.3	2.1	2.0	1.2	0.8	0.6	2.4	3.0	3.6	3.8	4.0	4.1	4.1	4.1	3.9	3.5	3.0	2.5	1.5
15	1.1	1.3	2.2	2.5	p4.6	p3.6	2.5	2.3	2.3	2.1	1.3	1.1	0.6	2.4	3.1	3.6	3.8	...b	4.4	4.5	4.1	4.0	3.7	3.2	2.6	1.4
16	1.1	1.3	2.1	p3.1	3.0	2.5	2.5	2.4	2.5	2.3	2.1	1.2	0.6	2.6	3.2	3.6	p4.0	4.2	4.1	4.8	4.2	4.0	3.7	3.5	2.6	1.5
17	1.2	1.0	2.2	2.4	2.4	2.4	2.3	2.0	2.1	2.1	1.3	1.2	1.0	2.4	3.2	3.7	4.2	4.2	4.3	4.1	4.0	3.7	3.6	3.1	2.6	1.5
18	1.2	1.3	2.0	2.3	2.4	2.4	2.3	2.3	3.2	3.0	1.3	1.1	0.6	2.4	3.1	3.6	3.9	4.2	4.2	4.2	4.1	3.9	3.6	3.2	2.5	1.5
19	1.2	1.3	1.4	2.0	2.0	2.3	2.2	2.1	2.2	2.1	1.3	1.2	1.0	2.4	3.1	3.6	3.8	4.0	4.3	4.2	4.1	3.8	3.6	3.2	2.6	1.6
20	1.2	1.3	2.0	2.3	2.2	2.4	2.3	2.3	2.3	2.1	1.3	1.2	1.0	2.4	3.1	3.6	3.9	4.1	4.2	4.2	4.1	3.9	3.7	3.1	2.6	1.4
21	1.1	1.2	1.4	2.1	2.3	2.3	2.3	2.3	2.1	2.0	1.3	1.2	1.0	2.4	3.1	3.5	3.8	4.0	4.1	4.2	4.0	3.8	3.5	3.1	2.5	1.5
22	0.5	1.2	1.2	2.2	2.2	2.2	2.2	2.2	2.2	2.0	1.3	1.2	0.7	2.4	3.1	3.5	3.8	4.1	4.2	4.2	4.0	3.8	3.6	3.1	2.5	1.5
23	1.1	1.2	2.1	2.1	2.0	3.7	2.3	2.3	2.2	2.2	1.2	1.2	0.9	2.4	3.1	3.6	3.8	4.0	4.4	4.4	4.0	3.9	3.7	3.2	2.6	1.5
24	0.5	1.3	2.0	2.1	2.1	2.2	2.3	2.2	2.2	2.1	1.3	1.2	0.7	2.3	3.0	3.6	3.8	4.1	4.2	4.3	4.1	3.9	3.7	3.4	2.6	1.7
25	1.2	2.1	1.4	p5.1b	2.3	2.3	2.4	2.3	2.4	2.0	2.2	1.2	1.0	2.5	3.2	3.6	...b	4.2	4.3	4.3	4.2	4.0	3.6	3.4	2.6	1.6
26	0.8	p3.7b	2.2	2.5	3.6	3.7	3.6	p4.4	p6.6	3.6	2.4	2.2	1.1	2.5	...b	3.8	4.1	4.3	4.4	4.5	4.4	...b	4.1	3.5	3.1	1.9
27	0.5	1.2	2.4	2.3	p5.4	3.6	3.6	2.5	2.4	2.2	1.9	1.2	1.0	2.5	3.2	3.7	2.2	...b	5.5	4.5	4.3	4.0	3.7	3.2	2.7	1.8
28	1.2	1.2	2.2	3.4	2.3	2.7	2.5	3.7	p6.1	2.5	2.1	1.2	1.1	2.5	3.2	3.7	3.9	4.2	4.3	4.2	4.6	...b	3.8	3.4	2.6	1.5
29	1.2	1.9	2.2	2.1	2.2	2.4	p5.2	...b	p5.2	2.2	2.2	1.2	0.7	2.4	3.1	3.7	3.9	4.0	4.2	...b	...b	...b	3.8	3.5	2.7	1.7
30	1.2	2.1	2.2	2.5	2.5	2.8	3.0	3.7	2.4	2.2	1.4	1.2	1.1	2.6	3.4	3.7	4.0	4.2	4.2	4.4	4.5	4.2	3.8	3.4	2.6	1.7
31																										
* MEAN	1.0	1.4	2.0	2.0	2.3	2.5	2.4	2.4	2.3	2.1	1.5	1.2	0.9	2.4	3.1	3.6	3.8	4.1	4.3	4.3	4.1	3.9	3.6	3.2	2.5	1.5

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 47

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1938 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND DECEMBER 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p9.8	p10.0	p9.0	p8.0	6.0	4.5	8.0	10.7	12.5	13.2	13.5	12.8	12.5	12.0	11.4	10.7	9.8	9.3	9.4	9.0	7.7	7.5	7.5	p7.6	9.7
2	p6.2	5.6	p6.8	p5.5	p5.5	p5.1	8.4	11.6	12.5	12.8	13.6	13.4	13.8	13.2	13.2	13.5	13.6	13.0	12.0	9.5	7.5	8.5	8.0	7.7	10.0
3	7.2	p8.5	p9.5	p8.5	p8.6	p7.7	7.6	10.5	12.3	13.2	13.6	13.7	13.9	13.9	13.8	14.0	13.7	13.2	12.4	11.2	8.7	8.5	9.1	8.8	10.9
4	7.5	7.7	8.0	8.4	8.5	7.3	10.0	12.2	13.2	14.0	13.8	13.4	13.2	12.7	12.7	12.8	12.5	11.9	11.3	11.1	10.3	10.1	10.0	9.0	10.9
5	8.5	8.5	p10.0	p9.0	p9.8	p7.8	9.6	11.7	13.2	13.9	13.8	14.0	...	...	11.8	10.8	10.5	10.6	10.5	10.5	9.4	9.3	9.3	8.5	...
6	6.3	p7.5	p8.0	p7.7	5.8	4.8	8.5	10.8	12.6	...	13.7	12.9	13.1	13.6	13.4	13.8	13.5	13.4	12.8	12.3	10.9	9.6	9.0	p10.5	...
7	p10.0	p8.4	6.7	5.2	4.8	3.4	7.8	10.2	12.4	13.2	13.4	13.7	12.8	12.1	12.7	12.8	13.1	13.3	13.2	12.5	11.0	10.6	9.6	8.9	10.5
8	p9.0	p10.0	p9.3	p7.6	5.6	4.2	8.7	10.9	12.8	13.3	13.3	13.2	13.2	12.7	12.6	12.3	12.4	12.3	11.9	10.8	10.0	8.8	8.1	p7.8	10.4
9	p8.0	p7.4	p6.6	6.6	5.4	4.8	8.4	11.0	12.4	12.8	12.4	10.7	10.4	10.5	11.2	12.1	12.8	12.8	12.6	12.0	10.8	10.0	9.6	9.3	10.0
10	8.8	8.1	7.5	6.8	6.0	4.2	8.7	11.0	12.8	13.6	12.0	12.0	11.7	11.9	12.0	12.3	12.2	12.4	12.9	12.7	12.6	11.9	11.1	10.4	10.6
11	9.8	8.9	8.0	7.2	6.3	6.1	9.3	11.5	12.7	13.5	13.4	12.8	12.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
12	...c	...c	...c	...c	...c	...c	...c	...c	...c	13.8	14.1	14.8	14.7	13.4	13.0	12.5	12.0	11.6	11.5	10.6	9.3	8.8	8.2	7.4	...
13	7.0	7.0	6.5	7.0	7.4	6.6	9.4	12.0	13.0	13.4	13.8	13.7	13.8	13.6	13.8	13.7	13.7	13.6	13.3	12.0	10.1	8.4	p8.7	p7.7	10.8
14	p7.7	p8.4	p7.8	7.6	7.2	6.7	9.5	11.9	12.8	13.2	13.8	13.4	12.7	12.1	12.2	11.9	12.3	11.7	11.6	10.9	9.4	p10.0	p9.5	p9.8	10.6
15	p9.7	p9.5	p10.3	p11.8	p9.9	5.9	8.5	10.9	13.0	13.1	14.2	14.4	13.8	13.2	12.0	11.8	11.9	11.7	11.9	11.5	9.7	p12.0	p9.8	p8.8	11.2
16	p9.2	p9.7	p9.4	p8.4	7.3	6.2	8.8	11.0	12.5	13.5	14.3	14.3	13.6	13.6	12.9	13.2	13.5	13.1	12.7	10.7	10.3	10.0	10.1	9.6	11.2
17	9.3	9.1	8.8	8.9	7.5	5.0	8.2	11.0	13.0	13.6	13.3	12.3	11.8	11.5	11.9	12.1	12.3	13.7	13.0	10.8	10.5	9.2	9.9	9.0	10.7
18	7.6	7.5	8.0	6.9	4.4	4.8	7.7	10.1	11.5	11.5	10.5	9.5	10.7	11.6	12.2	12.8	13.1	13.0	12.9	13.0	12.3	11.1	8.6	11.9	10.1
19	p8.5	p7.7	p7.7	p6.0	p5.8	3.6	7.4	11.0	12.7	12.5	12.2	11.3	11.1	11.6	11.9	12.2	12.0	12.3	12.0	10.7	10.5	10.2	10.1	8.8	10.0
20	8.1	7.8	7.6	7.1	6.6	4.5	8.0	10.4	11.0	10.8	10.3	11.0	11.8	12.8	12.8	13.8	13.7	13.7	13.4	11.9	10.8	10.0	9.0	8.6	10.2
21	7.4	7.7	7.9	7.0	6.0	4.5	8.0	10.7	12.7	13.2	14.0	13.4	13.3	13.0	13.0	12.8	12.6	13.0	13.2	12.2	10.5	9.1	p11.9	p11.8	10.8
22	p8.9	p8.4	p8.3	p9.0	p8.1	3.5	7.7	10.5	12.5	12.2	11.1	9.8	10.0	10.4	11.3	12.1	12.6	12.5	12.8	12.6	11.0	9.0	p9.5	p11.9	10.2
23	p9.0	6.6	7.4	7.0	5.6	4.0	7.7	10.3	11.8	11.4	10.7	10.0	10.5	10.6	11.4	11.6	12.1	12.6	13.3	12.7	12.0	10.5	10.2	9.1	9.9
24	8.0	9.5	7.4	5.1	3.4	3.6	7.2	9.7	11.2	11.2	9.6	9.0	9.3	9.5	9.9	10.7	11.3	12.0	12.4	11.5	10.1	9.1	8.2	7.1	9.0
25	p6.9	p6.1	p6.6	6.1	6.2	5.2	7.9	10.1	11.0	10.6	9.2	9.4	9.8	10.1	10.1	10.7	11.3	11.3	11.1	10.6	9.3	7.9	7.4	7.1	8.8
26	p7.5	6.6	6.0	5.4	4.7	3.8	7.5	10.1	11.7	11.0	9.3	8.9	9.1	10.0	10.6	11.5	12.1	11.9	11.6	10.7	9.5	7.8	7.5	p7.5	8.8
27	p7.4	p8.0	p9.9	p7.7	p7.0	4.9	7.9	10.5	11.6	11.7	10.3	9.2	9.4	9.6	10.2	10.6	10.5	10.8	10.8	10.1	9.4	8.7	7.1	6.1	9.1
28	5.3	5.6	5.6	5.2	4.6	4.5	7.7	10.0	11.5	11.8	10.2	9.6	9.8	10.0	10.2	10.7	11.2	11.4	12.1	11.8	11.3	10.1	8.9	8.5	9.1
29	7.5	6.6	5.8	4.9	3.7	2.9	7.2	9.4	11.1	11.9	12.3	11.2	10.2	10.4	10.6	10.5	10.7	10.8	11.0	10.1	8.9	8.5	7.5	p7.5	8.8
30	p7.3	p7.7	p7.9	p6.8	5.9	4.6	7.6	10.2	11.5	12.1	11.7	10.7	10.3	10.6	11.2	12.0	12.4	12.0	11.1	9.9	7.8	7.2	7.2	p6.0	9.2
31	p6.0	p6.0	p5.9	p5.5	3.8	2.9	7.2	9.6	11.2	11.6	11.6	11.2	11.5	12.5	12.7	13.1	12.7	12.7	11.8	9.9	7.5	p8.0	p7.5	p5.5	9.1
MEAN*	8.0	7.9	7.8	6.8	6.2	4.9	8.2	10.7	12.2	12.6	12.4	11.9	11.8	11.8	12.0	12.2	12.3	12.2	12.1	11.2	10.0	9.3	8.9	8.6	10.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 48

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1938 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — DECEMBER 1938

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	290	300	290	250	220	250	250	260	280	270	290	280	270	280	320	280	260	260	300	340	330	360	350	270	285
2	300	280	280	240	210	250	250	260	260	280	300	310	290	290	270	290	250	270	300	390	370	350	330	350	290
3	300	420	450	400	370	330	270	230	260	280	260	270	280	280	280	280	280	270	300	360	390	290	320	300	311
4	290	280	260	250	220	250	250	260	270	270	260	280	290	...b	290	280	270	260	280	310	300	400	400	390	...
5	380	350	320	300	260	250	260	260	270	270	270	280	...	...	300	280	270	270	280	300	350	360	360	340	...
6	350	330	280	220	230	230	260	260	270	280	280	280	290	280	280	300	270	260	280	320	330	380	330	300	287
7	300	280	230	220	210	250	260	260	280	270	280	280	280	280	280	280	280	260	290	320	320	370	360	360	283
8	370	330	270	230	230	250	250	260	270	280	280	280	280	270	270	270	270	250	280	340	400	410	400	330	294
9	300	280	250	230	220	250	250	260	270	270	280	290	280	280	280	280	290	260	300	350	340	360	320	300	283
10	270	270	260	250	240	250	260	260	260	280	280	280	280	290	280	300	270	280	300	310	310	290	280	280	276
11	300	300	280	250	230	250	260	270	270	270	270	280	280	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
12	...c	...c	...c	...c	...c	...c	...c	...c	...c	260	280	270	280	280	280	260	270	270	300	340	300	300	400	370	...
13	310	260	260	270	230	240	260	260	260	270	270	280	280	290	270	270	260	250	300	350	390	400	400	330	290
14	360	330	310	260	230	250	260	260	260	280	280	280	280	280	270	270	260	260	290	350	450	480	450	400	308
15	380	320	300	270	230	220	260	260	260	270	270	280	280	290	280	280	270	260	300	300	350	310	340	410	291
16	420	430	330	240	210	240	260	270	270	280	...	300	290	300	280	270	270	260	300	350	330	350	300	240	...
17	250	270	280	300	220	260	260	280	260	260	260	270	270	280	300	260	250	250	280	350	400	330	280	400	284
18	380	300	240	220	250	270	260	260	280	280	270	270	270	280	300	440	280	270	290	310	320	380	410	490	305
19	500	470	450	400	320	280	390	270	270	270	300	300	310	300	290	260	270	260	300	350	370	360	370	360	334
20	360	300	280	250	220	250	270	250	270	280	300	310	300	300	290	260	260	270	300	340	350	380	350	340	295
21	290	270	240	240	240	240	260	260	270	280	280	330	280	290	280	290	270	260	280	330	350	340	290	350	284
22	320	340	270	220	210	250	270	270	280	300	290	280	300	290	300	300	...a	...a	...a	320	370	390	350	350	...
23	330	300	260	250	250	250	270	260	230	280	300	310	360	290	320	260	270	260	250	300	330	350	260	310	292
24	310	270	240	230	250	250	260	260	260	290	300	300	290	280	280	270	270	250	280	320	380	380	350	310	287
25	290	260	260	260	240	240	260	280	280	300	300	310	300	300	280	270	270	250	280	340	400	450	370	350	298
26	300	260	240	240	230	230	260	250	280	280	290	290	320	310	290	280	280	260	280	330	300	420	400	400	292
27	400	370	380	320	300	240	250	270	290	310	340	340	340	350	330	270	260	260	280	300	350	380	390	340	319
28	310	300	290	280	230	240	260	270	290	310	310	370	360	340	310	270	280	250	260	300	310	310	310	280	293
29	260	260	260	260	240	250	260	270	...	310	330	330	370	310	300	280	270	260	260	300	350	360	380	300	...
30	250	320	310	250	210	230	250	280	300	270	360	330	380	360	330	280	280	250	280	370	400	400	380	350	309
31	310	260	250	230	240	260	260	270	290	310	310	380	250	290	300	290	250	260	280	340	390	380	430	400	301
MEAN*	326	310	287	261	240	250	263	263	273	281	290	298	298	295	291	282	269	260	286	331	354	367	355	343	295

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 49

DECEMBER 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1938

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.6	5.3	5.4	5.6	5.4	5.2	5.5	5.5	4.9	4.2	...	...
2	...	4.5	4.8	5.4	5.8	5.7	5.6	5.5	5.2	5.2	...	...	...
3	...	...	...	5.3	5.2	5.3	5.3	5.4	5.0	4.9	4.5	...	...
4	...	4.6	5.0	5.3	5.4	5.5	5.5	...b	5.4	5.3	4.2	...	...
5	...	4.8	5.1	5.4	5.4	5.5	...	...	5.4	5.0	4.4	...	...
6	...	4.6	5.0	5.3	5.4	5.2	5.5	5.4	5.3	5.4	4.4	...	...
7	...	4.9	5.2	5.2	5.4	5.4	5.4	5.4	5.2	5.0	4.6	...	...
8	...	5.0	5.2	5.5	5.5	5.5	5.5	5.4	5.2	4.8	4.3	...	...
9	...	4.8	5.1	5.3	5.4	5.5	5.5	5.3	5.3	4.9	4.9	...	...
10	...	4.5	4.9	5.4	5.4	5.5	5.5	5.5	5.3	5.2	4.3	...	...
11	...	4.8	5.2	5.0	5.4	5.5	5.5	...c	...c	...c	...c	...	...
12	...	...c	...c	4.8	5.4	5.4	5.5	5.4	5.3	4.6	4.6	...	...
13	...	4.6	4.8	5.3	5.4	5.5	5.5	5.4	5.2	4.8	4.3	...	...
14	...	4.9	5.1	5.3	5.4	5.5	5.5	5.5	5.3	4.9	4.3	...	...
15	...	4.6	5.0	5.3	5.3	5.4	5.5	5.3	5.3	5.0	4.3	...	...
16	...	4.9	5.1	5.3	...	5.4	5.5	5.4	5.2	5.0	4.5	...	...
17	...	5.0	4.9	5.1	5.2	5.5	5.4	5.5	5.5	4.6	...	...	...
18	...	4.6	5.2	5.5	5.4	5.4	5.6	5.6	5.6	5.8	4.6	...	...
19	...	4.7	5.1	5.4	5.8	5.8	5.7	5.7	5.5	4.7	4.5	...	...
20	...	...	5.0	5.5	5.8	5.8	5.9	5.8	5.6	4.7	4.2	...	...
21	...	4.3	5.3	5.6	5.5	5.9	5.6	5.5	5.5	5.0	4.6	...	...
22	...	5.0	5.0	5.5	5.5	5.4	5.6	5.6	5.5	5.4	...a	...	...
23	...	4.5	5.5	5.3	5.8	5.7	5.0	5.6	5.6	4.6	4.5	...	...
24	...	4.2	4.8	5.4	5.4	5.3	5.3	5.2	5.3	4.7	4.3	...	...
25	...	4.8	5.1	5.4	5.3	5.4	5.4	5.4	5.0	4.8	4.4	...	...
26	...	...	5.0	5.2	5.2	5.4	5.5	5.3	5.1	4.9	4.3	...	...
27	...	4.9	5.2	5.5	5.5	5.5	5.5	5.4	5.3	4.8	4.2	...	...
28	...	4.5	5.0	5.2	5.3	5.5	5.5	5.3	5.1	4.8	4.5	...	...
29	...	5.0	...	5.4	5.5	5.4	5.5	5.3	5.1	4.7	4.4	...	...
30	...	4.7	5.1	5.0	5.4	5.4	5.5	5.5	5.3	4.8	4.4	...	...
31	...	4.8	5.3	5.4	5.4	5.7	5.5	5.2	5.2	5.0	4.2	...	...
* MEAN	...	4.7	5.1	5.3	5.4	5.5	5.5	5.4	5.3	4.9	4.4	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	240	220	230	220	200	200	200	220	200	210	...	...
2	...	240	230	220	220	210	210	220	230	220	...	...	...
3	...	...	...	260	230	220	220	220	220	220	250	...	...
4	...	230	230	210	220	210	210	...b	220	220	220	...	...
5	...	240	230	220	200	...	200	210	220	230	240	...	...
6	...	240	230	220	210	210	...b	200	210	240	240	...	...
7	...	240	230	210	210	210	200	...b	220	230	250	...	...
8	...	230	220	210	210	220	210	200	220	210	230	...	...
9	...	230	210	210	210	210	190	200	200	230	240	...	...
10	...	240	220	210	210	210	210	210	220	230	250	...	...
11	...	250	230	200	210	200	200	...c	...c	...c	...c	...	...
12	...	...c	...c	190	210	210	210	210	210	210	230	...	...
13	...	240	230	210	220	220	210	210	210	220	240	...	...
14	...	230	220	220	210	200	200	210	210	220	230	...	...
15	...	240	220	220	190	200	200	200	200	220	230	...	...
16	...	240	230	220	...	210	210	210	210	210	230	...	...
17	...	240	230	210	200	210	200	200	200	230	...	...	...
18	...	240	240	230	220	210	200	210	200	220	250	...	...
19	...	240	220	220	220	220	210	220	210	210	240	...	...
20	...	...	230	230	220	220	220	200	210	200	230	...	...
21	...	240	220	210	230	210	200	210	210	200	240	...	...
22	...	240	220	210	200	220	210	220	210	220	...a	...	...
23	...	240	220	210	210	200	210	200	200	200	230	...	...
24	...	240	220	210	200	200	200	190	200	210	230	...	...
25	...	240	230	220	210	210	200	200	200	210	220	...	...
26	...	...	210	210	200	200	200	200	200	200	230	...	...
27	...	230	220	210	210	200	200	210	210	200	220	...	...
28	...	230	220	210	200	200	200	200	200	210	220	...	...
29	...	230	...	210	210	200	200	200	190	200	230	...	...
30	...	230	200	200	200	210	200	200	200	200	220	...	...
31	...	230	230	210	210	210	200	210	200	200	210	...	...
* MEAN	...	237	224	215	211	209	204	206	209	214	232	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 50

DECEMBER 1938

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1938

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	1.2	1.4	2.5	2.2	2.2	2.2	4.1	2.0	2.0	1.3	1.2	1.0	2.4	3.2	3.8	4.0	4.2	4.2	4.2	4.1	3.9	3.6	3.2	2.7	1.8
2	1.2	1.3	2.2	2.1	2.2	2.4	2.4	3.6	2.2	2.2	2.0	1.2	0.6	2.4	3.3	3.7	3.9	4.1	4.3	4.2	4.4	4.0	3.7	3.2	2.6	1.8
3	1.1	1.2	3.7	2.3	2.4	2.5	2.4	3.5	3.3	3.3	1.4	1.1	0.6	2.3	3.5	4.3	4.0	4.2	4.2	4.5	4.2	3.9	3.6	3.4	2.7	1.7
4	1.2	1.5	2.0	2.3	2.3	2.4	3.0	p6.4b	2.2	2.0	1.4	1.2	0.6	2.3	3.0	3.7	3.8	4.5	4.3	4.5	...b	3.9	3.6	3.4	2.7	1.8
5	1.2	1.4	2.1	2.3	...	...	2.4	2.4	2.3	3.0	2.1	1.2	1.2	2.4	3.2	3.7	4.0	...	...	4.4	4.3	4.1	3.8	3.5	2.8	1.8
6	1.2	1.7	1.8	2.0	2.4	2.4	...b	3.0	2.3	2.1	2.1	1.2	1.2	2.5	3.1	3.7	3.9	4.2	4.3	...b	4.5	4.0	p4.1	3.4	2.8	1.8
7	1.4	1.3	2.1	2.1	2.3	2.4	3.5	p4.1b	3.2	2.4	2.3	1.3	0.8	2.5	3.1	3.7	3.9	4.1	4.3	4.5	...b	4.4	4.1	3.5	2.7	1.8
8	1.3	1.4	2.0	2.2	2.3	2.4	3.4	2.4	3.3	2.2	1.4	1.2	1.2	2.4	3.2	3.6	3.9	4.2	4.4	4.5	4.3	4.2	3.8	3.4	2.7	2.0
9	1.2	1.3	1.4	2.0	2.3	2.2	2.3	2.2	2.2	2.2	2.1	1.2	1.1	2.4	3.2	3.6	3.9	4.2	4.4	4.5	4.4	4.0	3.8	3.4	2.8	1.9
10	1.0	1.2	1.2	2.0	2.3	3.3	2.4	2.3	2.1	2.0	1.4	1.2	0.8	2.4	3.1	3.6	3.9	4.2	4.5	4.5	4.3	4.1	3.8	3.4	2.9	2.3
11	1.2	1.3	2.1	2.0	2.2	2.3	2.4	...c	...c	...c	...c	...c	...c	2.5	3.1	3.9	3.8	4.2	4.2	4.3	...c	...c	...c	...c	...c	...c
12	...c	...c	...c	2.0	2.1	2.2	2.3	2.4	2.2	2.0	1.3	1.2	1.0	...c	...c	...c	3.8	4.1	4.3	4.3	4.3	4.0	3.7	3.4	2.8	1.8
13	1.1	1.4	1.3	2.1	2.2	2.1	2.4	2.3	2.2	2.2	2.0	1.2	1.1	2.4	3.2	2.6	3.9	4.3	4.4	4.4	4.3	4.1	3.8	3.5	2.8	1.8
14	0.7	1.3	1.3	1.4	2.1	2.2	2.3	2.2	2.1	2.0	1.8	1.1	0.5	2.4	3.1	3.5	3.9	4.1	4.3	4.3	4.2	4.0	3.8	3.4	2.8	1.9
15	0.5	1.1	1.3	2.2	2.2	2.2	2.2	2.2	2.1	1.9	1.3	1.1	0.5	2.4	3.1	3.5	3.8	4.1	4.3	4.3	4.2	3.9	3.8	3.4	2.8	2.0
16	0.5	1.1	1.3	2.1	2.1	2.4	2.2	2.2	2.2	2.0	1.3	1.1	1.0	2.6	3.1	3.5	4.0	4.1	4.3	4.3	4.1	3.9	3.6	3.6	2.8	1.8
17	0.6	1.1	1.7	1.3	2.1	2.1	2.1	2.2	2.2	1.4	1.3	0.8	0.6	2.3	2.9	3.9	3.8	4.0	4.1	4.2	4.1	3.8	3.9	3.5	2.6	1.6
18	0.7	0.9	1.3	1.4	2.1	2.2	2.2	2.3	2.4	2.2	2.0	0.8	1.1	2.2	3.0	3.7	3.8	4.1	4.2	4.2	4.2	4.1	3.8	3.4	2.8	1.8
19	1.0	1.4	1.3	1.3	2.0	2.2	2.2	2.2	2.1	2.0	1.3	0.8	0.5	2.3	3.0	3.6	3.9	4.1	4.2	4.3	4.2	3.9	3.7	3.5	2.8	2.0
20	0.5	1.2	1.3	2.1	2.2	2.4	2.4	2.1	3.3	1.4	1.2	0.8	0.5	2.3	3.0	3.5	3.8	4.1	4.4	4.3	4.2	3.9	3.7	3.2	2.9	2.0
21	0.5	0.9	1.3	2.3	2.3	2.3	2.4	2.2	2.2	2.1	1.2	0.8	0.6	2.3	3.0	3.5	3.8	4.1	4.2	4.3	4.1	3.9	3.7	3.7	2.8	2.1
22	0.6	0.8	1.2	2.0	2.1	2.3	2.2	2.2	3.3	2.0	0.8	0.8	0.5	2.2	3.0	3.9	3.8	3.9	4.1	4.1	4.1	3.9	3.7	...a	...a	...a
23	0.5	0.8	1.3	1.4	2.0	2.2	2.4	2.1	2.2	3.0	1.3	1.2	0.5	2.2	2.9	3.5	3.8	4.0	4.1	4.3	4.0	3.9	3.6	3.4	2.8	1.9
24	0.5	1.2	1.4	2.2	2.2	2.1	2.1	2.1	2.0	2.0	1.2	1.0	0.5	2.2	3.0	3.5	3.8	4.0	4.1	4.1	4.1	3.9	3.6	3.4	2.8	2.0
25	0.6	1.2	1.4	2.0	2.1	2.2	2.1	2.1	2.0	2.0	1.3	0.8	0.6	2.2	2.9	3.4	3.8	3.9	4.2	4.2	4.1	4.0	3.7	3.3	2.8	1.9
26	1.2	1.2	1.3	2.0	2.0	2.1	2.2	2.4	2.3	2.0	1.2	0.8	0.5	2.3	3.6	3.4	3.8	3.9	4.0	4.1	4.2	3.9	3.6	3.4	2.9	2.2
27	0.5	1.2	1.3	1.4	2.0	2.1	2.4	2.0	2.0	2.0	1.2	0.8	0.5	2.2	2.9	3.5	3.7	4.0	4.1	4.2	4.0	3.9	3.6	3.4	2.7	1.8
28	0.5	1.1	1.2	1.3	2.1	2.2	2.2	2.2	2.2	2.2	2.1	1.2	0.7	2.1	2.9	3.5	3.8	4.0	4.1	4.1	4.1	3.9	3.7	3.4	2.5	1.4
29	0.8	1.2	1.2	1.4	1.8	4.6	2.1	2.0	2.0	1.3	1.2	0.8	0.6	2.2	2.9	p5.0	3.7	3.9	4.1	4.1	4.0	3.9	3.7	3.3	2.8	2.0
30	0.5	1.2	1.3	1.4	2.1	2.1	2.2	2.2	2.2	1.3	1.3	1.1	0.6	2.2	2.9	3.4	3.7	3.9	4.0	4.1	4.1	3.9	3.8	3.3	2.9	1.9
31	0.5	1.2	1.2	1.3	2.0	2.2	2.3	2.0	2.1	1.3	1.3	0.8	0.6	2.2	3.0	3.7	3.8	4.0	4.1	4.2	4.4	3.8	3.6	3.4	2.7	1.9
MEAN*	0.8	1.2	1.6	1.9	2.2	2.4	2.4	2.4	2.4	2.1	1.5	1.4	0.7	2.3	3.1	3.6	3.8	4.1	4.2	4.3	4.2	4.0	3.6	3.4	2.8	1.9

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 51

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1939 | JANUARY 1939

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p5.3	p5.5	p5.9	p6.1	p7.2	5.3	7.8	10.1	12.2	13.0	13.0	12.7	12.6	13.4	14.1	13.6	13.6	14.0	13.5	11.7	9.9	p9.8	p9.0	p8.6	10.3
2	p7.2	p7.2	6.3	6.2	6.1	5.7	8.1	9.5	10.6	11.4	10.9	10.4	10.7	11.5	11.9	12.6	13.0	12.8	12.7	11.4	9.5	8.7	p8.8	p8.0	9.6
3	p7.7	p5.6	5.2	5.8	p5.5	4.3	7.2	9.8	12.1	12.4	12.1	11.3	11.8	11.9	11.9	11.9	11.9	12.5	12.4	11.8	11.0	9.0	p10.0	p9.2	9.6
4	p9.0	p7.0	5.8	4.6	3.1	6.2	6.8	9.2	10.6	11.0	11.0	11.1	12.0	12.0	12.4	12.6	12.7	12.5	12.2	11.4	10.2	8.4	p9.5	p9.5	9.6
5	p9.5	p8.5	p7.5	p5.9	4.2	3.1	6.9	9.4	11.8	12.9	13.0	13.5	13.6	13.9	13.8	...	13.5	13.5	13.1	12.2	11.7	11.0	10.5	9.4	...
6	8.6	7.4	6.1	5.8	5.3	5.1	5.0	8.7	10.0	10.0	9.4	9.1	9.2	9.6	10.4	11.0	11.7	11.8	11.6	10.1	8.1	p8.5	p8.3	p7.8	8.7
7	p7.8	6.3	6.2	5.7	5.1	4.0	7.7	10.2	11.7	12.0	10.1	9.8	10.6	12.0	12.5	12.7	12.2	12.2	12.5	11.0	8.9	p10.5	p11.7	p7.5	9.6
8	p6.7	5.8	4.6	3.6	3.1	3.2	6.6	9.1	9.4	9.0	9.0	9.4	9.8	10.6	11.2	12.0	12.4	12.6	12.5	11.9	10.1	8.9	p9.5	p7.5	8.7
9	p7.0	6.1	6.0	4.6	3.3	3.2	7.0	9.5	10.1	8.9	9.7	9.2	10.1	10.9	11.4	11.8	...c	11.9	11.8	11.6	11.7	11.3	8.9	7.7	...
10	7.0	6.6	5.9	4.7	3.9	3.1	7.2	10.2	10.8	10.0	8.8	8.7	9.0	9.3	10.0	10.8	10.5	10.8	11.7	11.7	10.7	10.5	9.7	7.5	8.7
11	6.3	5.9	5.5	4.9	3.6	2.6	6.8	10.0	10.5	10.3	8.8	8.6	9.1	9.5	10.5	11.1	11.5	11.5	11.8	11.7	11.7	10.4	9.9	9.0	8.8
12	7.4	6.3	6.0	5.8	5.9	5.8	8.1	10.5	11.7	11.9	10.1	9.7	9.8	9.9	10.2	10.2	10.5	10.7	10.8	10.8	11.4	10.0	8.6	7.8	9.2
13	7.4	p8.5	p8.0	p6.0	4.8	4.3	7.6	9.9	10.9	10.0	8.7	8.4	8.4	8.6	9.1	9.6	9.8	9.9	9.8	9.9	8.1	8.7	8.8	7.9	8.5
14	7.3	7.1	7.0	7.1	6.2	5.1	7.9	10.9	12.0	11.3	8.9	8.4	9.1	9.7	10.0	10.7	11.3	11.6	12.0	12.1	11.5	11.3	11.0	9.8	9.6
15	8.7	8.4	7.5	6.6	5.8	5.2	7.9	10.5	11.3	10.7	10.4	10.4	10.1	10.2	10.8	11.5	11.5	11.1	10.5	9.5	8.9	8.1	7.7	8.1	9.2
16	8.4	8.7	7.3	5.0	3.1	2.2	6.4	9.1	11.0	10.7	9.6	9.8	9.6	9.6	9.9	9.9	9.7	9.2	9.3	9.1	8.5	8.2	7.6	7.1	8.3
17	p8.4	p9.0	p9.4	p8.4	7.1	6.9	8.3	10.2	11.5	12.2	12.0	11.5	11.1	11.7	11.3	11.0	10.6	9.8	9.4	8.8	p11.9	p10.2	p9.2	p9.2	10.0
18	p7.6	p5.7	p5.7	p5.6	p5.6	p5.0	6.7	8.6	9.9	9.7	9.9	10.1	11.2	11.9	11.7	12.2	12.6	12.3	12.7	12.6	11.5	9.7	p9.0	p7.8	9.4
19	p7.7	p6.3	6.3	5.0	3.0	2.3	5.6	8.5	9.2	9.3	8.6	8.6	9.0	10.2	10.8	11.1	11.4	11.1	10.7	10.5	9.7	8.7	p8.9	p8.7	8.4
20	p9.3	p7.9	6.9	6.7	5.5	4.0	6.3	8.5	9.6	9.7	9.4	9.7	11.0	12.6	13.2	13.0	12.7	12.5	12.3	12.0	9.7	p11.0	p12.0	p10.5	9.8
21	p8.4	6.8	5.2	4.2	2.5	1.6	5.6	8.5	9.8	9.0	9.0	9.8	11.2	12.4	13.1	13.1	13.0	12.7	12.5	11.8	10.1	p10.3	7.9	8.0	9.0
22	7.5	7.6	7.4	6.4	4.9	3.5	6.0	8.4	9.5	9.5	9.8	10.2	11.3	12.3	12.4	12.7	13.2	13.6	13.7	12.7	11.8	10.5	10.6	9.9	9.8
23	8.6	7.6	7.1	6.4	5.3	p3.0	5.9	8.8	11.5	10.7	9.4	9.4	10.3	11.1	12.0	12.6	13.0	13.2	12.7	12.2	10.3	p12.0	p10.0	p10.6	9.7
24	7.6	6.8	6.0	6.1	5.6	4.9	6.7	9.6	9.8	8.8	8.7	8.8	8.9	...c	...c	...c	...c	...c	...c	...c	10.3	p10.2	p10.2	p9.3	...
25	p10.1	p8.1	6.6	5.4	4.6	3.7	6.3	9.2	10.7	11.0	...c	...c	9.4	10.4	11.4	12.1	12.6	12.7	12.4	12.5	12.0	10.7	9.9	8.8	...
26	7.1	6.1	4.6	3.9	2.9	2.5	6.1	9.1	10.7	10.9	9.6	9.2	9.3	10.2	10.7	11.4	11.7	12.0	11.5	11.1	9.7	p9.5	p10.3	p9.8	8.7
27	p8.2	7.1	6.2	4.8	3.8	2.1	6.1	9.3	10.2	11.8	11.1	10.0	10.2	10.5	11.1	11.8	12.7	12.6	12.6	12.1	10.2	p12.8	p10.2	p8.6	9.4
28	p8.2	p6.5	p5.3	p4.8	p5.0	p5.5	6.2	9.0	10.8	11.6	11.0	9.5	9.6	10.2	10.6	11.8	12.4	12.4	12.5	12.2	10.8	9.6	10.0	10.4	9.4
29	8.8	7.2	5.8	4.8	4.0	3.5	6.4	9.1	10.2	10.8	11.8	11.8	11.6	11.7	10.4	10.5	10.9	11.5	12.0	11.7	10.4	9.2	8.4	p8.6	9.4
30	8.7	7.5	7.0	6.6	6.0	4.6	6.3	8.3	11.0	11.2	11.1	10.4	10.4	10.1	10.2	10.5	10.5	11.0	10.9	10.6	9.2	p9.5	p8.8	p11.5	9.2
31	p11.2	p9.5	p8.0	6.0	5.2	4.4	6.4	9.5	10.5	11.4	12.0	13.0	13.7	13.3	12.7	12.4	12.2	12.6	12.5	11.5	9.7	p9.0	p8.2	p7.5	10.4
MEAN*	7.9	7.1	6.4	5.6	4.7	4.1	6.8	9.4	10.7	10.7	10.2	10.1	10.4	11.0	11.4	11.7	11.9	12.0	11.9	11.3	10.3	9.9	9.5	8.8	

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 62

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1939 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JANUARY 1939

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	340	290	270	250	250	250	250	270	310	310	270	350	350	330	330	250	320	260	280	340	380	400	320	300	303
2	260	250	260	280	250	250	260	280	270	320	370	350	300	320	300	270	280	250	290	350	350	340	300	390	298
3	360	310	270	240	240	250	250	250	300	350	320	320	320	340	270	270	270	250	280	320	350	350	360	370	300
4	320	240	230	230	240	260	260	270	260	320	310	340	340	300	320	310	270	250	270	330	330	310	270	270	285
5	300	290	240	230	220	240	250	260	280	290	330	310	300	280	240	...c	270	250	280	280	350	340	300	300	...
6	270	240	250	250	270	260	270	260	290	320	360	350	350	300	290	250	270	260	270	330	400	390	350	340	300
7	270	260	240	240	210	240	240	270	290	300	300	300	290	280	300	270	280	250	280	330	300	260	240	250	270
8	270	250	240	240	230	260	260	280	280	300	280	320	320	320	310	320	270	250	280	340	350	320	360	330	291
9	320	270	230	230	220	240	260	280	290	280	290	380	290	280	290	270	...c	250	280	290	300	300	320	300	...
10	270	300	300	260	240	250	260	280	290	310	310	300	310	290	270	280	270	260	280	300	340	330	300	300	288
11	330	290	270	250	240	240	260	280	280	300	300	310	280	330	310	290	270	260	280	310	330	280	260	290	...
12	330	370	350	300	240	220	260	260	270	290	290	280	310	370	370	370	300	250	280	300	330	320	310	310	303
13	370	370	250	280	240	230	260	280	290	280	340	350	440	450	480	380	400	...	290	320	340	250	230	260	...
14	300	290	280	280	260	230	260	280	300	320	370	400	450	...b	430	470	310	250	260	290	300	360	270	290	...
15	290	290	330	320	280	240	270	270	280	320	380	350	350	400	350	270	250	250	270	340	350	340	290	270	306
16	240	230	220	220	240	250	270	270	320	330	380	400	350	450	450	460	360	250	280	320	380	360	400	370	325
17	390	360	330	300	250	230	270	280	300	300	230	320	380	400	320	310	310	250	270	360	400	420	300	220	312
18	250	230	250	200	230	240	270	290	300	300	320	320	320	320	300	250	270	250	260	300	330	300	370	400	286
19	380	290	230	230	230	250	250	270	320	320	330	350	310	380	300	290	260	240	280	330	350	370	350	370	303
20	310	250	250	230	230	230	270	270	290	300	350	300	340	340	330	350	310	250	280	310	360	380	350	300	299
21	260	230	230	220	240	270	270	270	310	330	330	340	330	340	320	300	300	250	270	300	280	280	270	260	283
22	260	250	250	230	230	250	280	250	320	320	330	340	340	340	340	290	270	250	270	300	300	300	290	300	288
23	290	280	280	250	230	250	270	250	290	310	320	350	330	330	340	300	280	260	270	330	350	230	260	250	290
24	260	240	270	300	260	240	270	270	290	320	340	370	360	...	...	...	...	...	...	...	380	360	390	360	...
25	300	280	250	250	240	220	250	270	300	300	...	...	350	370	360	300	300	250	270	280	300	·290	260	250	...
26	250	230	240	250	250	240	250	[illegible]	290	300	370	340	350	320	340	290	300	250	280	320	390	420	380	280	300
27	260	240	230	220	230	240	260	250	260	320	320	360	360	330	340	260	270	260	260	330	400	450	360	350	306
28	310	300	260	250	240	240	270	260	290	300	350	320	320	350	330	400	400	250	280	310	360	330	290	240	303
29	240	230	220	240	230	240	260	260	250	250	300	320	320	340	350	290	270	250	270	300	350	320	380	260	282
30	250	250	250	240	240	240	270	27	300	300	300	300	360	330	310	300	260	260	260	310	370	400	390	320	296
31	290	280	250	220	230	230	260	260	270	280	330	300	330	310	330	280	260	260	270	330	360	350	320	280	288
MEAN*	295	274	262	249	240	243	262	271	291	306	324	335	337	339	331	309	291	253	276	317	347	340	315	304	296

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 53

JANUARY 1939 JANUARY 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	5.0	5.1	5.3	5.4	5.8	5.8	5.7	5.5	4.2	5.2	...	...
2	...	4.8	4.7	5.5	5.8	5.5	5.2	5.4	5.2	4.7	4.6	...	...
3	...	4.7	5.6	5.8	5.7	5.5	5.5	5.6	4.7	4.3	4.8	...	...
4	...	5.0	4.7	5.3	5.6	5.8	5.5	5.1	5.4	5.2	4.3	...	...
5	...	4.5	5.3	5.6	5.9	5.7	5.7	4.9	4.4	...	4.2	...	...
6	...	4.5	5.2	5.5	5.8	5.5	5.7	5.6	5.6	4.2	4.3	...	...
7	...	4.4	5.2	5.4	5.4	5.4	5.3	5.2	5.3	4.8	4.6	...	...
8	...	4.8	5.1	5.4	5.2	5.5	5.5	5.4	5.2	4.5	4.5	...	...
9	...	4.8	4.9	5.3	5.2	5.8	5.5	5.3	5.2	5.0	...c	...	...
10	...	4.8	5.2	5.4	5.3	5.3	5.4	5.2	5.0	4.8	4.3	...	...
11	...	5.2	5.0	5.3	5.3	5.4	5.3	5.4	5.2	5.0	4.5	...	...
12	...	4.3	4.8	5.1	5.3	5.4	5.4	5.6	5.5	5.4	4.8	...	...
13	...	4.7	5.1	5.3	5.4	5.7	5.7	5.6	5.4	5.3	...	...	...
14	...	4.5	5.3	5.5	5.9	5.9	5.8	...b	5.0	6.0	5.1	...	...
15	...	4.3	4.9	5.6	5.8	5.6	5.6	5.6	5.4	4.5	...	...	...
16	...	4.6	5.2	5.6	6.0	6.0	5.5	5.0	6.0	6.1	5.5	...	...
17	...	5.1	5.6	5.6	6.0	5.7	5.8	6.0	5.3	5.4	5.0	...	...
18	...	5.0	5.6	5.8	5.6	5.5	5.2	5.5	5.1	4.6	4.3	...	...
19	...	4.7	5.5	5.5	5.4	5.5	5.4	5.6	5.2	4.8	4.2	3.7	...
20	...	4.5	5.1	5.5	5.5	5.4	5.5	5.5	5.3	5.5	4.8	...	...
21	...	5.0	5.2	5.4	5.4	5.4	5.4	5.5	5.2	5.0	4.8	...	...
22	...	...	5.4	5.5	5.4	5.4	5.5	5.4	5.3	4.9	4.3	...	...
23	...	...	5.0	5.3	5.2	5.4	5.5	5.3	5.4	5.0	4.6	...	...
24	...	4.2	4.9	5.3	5.5	5.5	5.5	...	...	...	...	...	...
25	...	4.8	5.3	5.1	...	...	5.5	5.5	5.4	5.2	4.9	...	...
26	...	4.9	5.0	5.1	5.6	5.4	5.5	5.3	5.3	5.0	4.8	...	...
27	...	4.9	5.2	5.3	5.4	5.7	5.6	5.4	5.4	4.6	4.5	4.1	...
28	...	4.8	5.0	5.3	5.5	5.4	5.4	5.5	5.3	5.8	5.8	...	...
29	...	4.5	5.2	5.2	5.6	5.4	5.4	5.5	5.5	4.9	4.3	...	...
30	...	4.6	5.5	5.5	5.6	5.4	5.9	5.5	5.2	5.0	4.7	...	...
31	...	4.0	4.8	5.3	5.7	5.4	5.5	5.4	5.3	5.0	4.2	...	...
* MEAN	...	4.7	5.2	5.4	5.6	5.5	5.5	5.4	5.3	5.0	4.7	3.9	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	210	200	190	190	190	190	190	200	230	...	...
2	...	220	200	200	200	210	200	200	190	200	230	...	...
3	...	240	200	200	200	200	200	180	200	230	230	...	...
4	...	230	210	220	220	210	200	190	190	190	240	...	...
5	...	230	230	220	200	200	190	180	170	...	240	...	...
6	...	240	220	200	200	200	200	200	190	200	240	...	...
7	...	220	220	200	200	200	200	190	190	180	230	...	...
8	...	210	210	200	200	200	200	200	200	230	240	...	...
9	...	230	200	200	200	200	200	200	200	210	210	...	...
10	...	210	210	200	200	200	190	190	180	210	240	...	...
11	...	230	200	200	200	200	200	200	230	...c	240	...	...
12	...	230	200	190	200	200	200	200	200	210	230	...	...
13	...	210	220	220	210	210	200	200	200	240	250	...	...
14	...	240	220	220	205	200	190	...b	180	200	240	...	...
15	...	240	230	230	210	200	200	200	170	190	...	...	...
16	...	240	230	220	210	200	200	200	200	200	220	...	...
17	...	230	200	200	200	200	200	200	190	180	220	...	...
18	...	210	200	200	200	210	210	200	200	170	240	...	...
19	...	240	230	220	210	200	210	210	200	200	200	220	...
20	...	240	220	200	200	220	210	220	210	270	240	...	...
21	...	240	230	210	200	200	210	200	210	200	230	...	...
22	...	...	220	210	210	200	200	210	210	200	210	...	...
23	...	...	...c	220	210	220	200	200	180	200	240	...	...
24	...	230	210	210	200	200	200	...	...	...	...	...	...
25	...	240	220	210	...	...	180	190	180	180	230	...	...
26	...	230	220	210	200	200	190	180	180	200	210	...	...
27	...	230	210	210	200	210	200	190	180	200	220	240	...
28	...	240	230	210	200	210	205	200	200	200	230	...	...
29	...	240	230	190	180	210	200	200	200	180	220	...	...
30	...	240	220	220	210	210	220	210	200	190	180	...	...
31	...	240	230	210	200	200	200	210	180	190	230	...	...
* MEAN	...	231	216	208	202	204	200	198	193	202	228	230	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f°F2 EQUAL TO OR LESS THAN f°F1   h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 54

JANUARY 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1939

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.5	0.7	1.2	1.2	1.4	2.2	2.4	2.3	2.3	2.0	0.8	1.2	1.1
2	0.5	0.7	1.2	1.0	2.0	2.1	2.1	2.2	2.2	2.0	1.3	1.1	0.5
3	0.6	0.8	1.2	2.0	2.0	2.1	2.1	2.1	2.0	1.2	1.2	1.2	0.7
4	0.5	0.5	1.2	1.4	2.1	2.1	2.1	2.1	2.2	2.0	1.3	1.2	0.5
5	0.8	1.2	2.0	2.1	2.1	2.3	2.5	2.4	2.3	...	1.3	1.2	1.2
6	0.5	0.8	1.3	1.4	2.1	2.2	2.3	2.2	2.2	2.1	1.2	0.7	0.6
7	0.5	1.1	1.2	1.3	2.1	2.2	2.3	2.3	2.4	2.2	1.4	0.6	0.6
8	0.5	0.8	1.3	1.5	2.0	2.2	2.2	2.3	2.3	2.2	1.2	0.8	0.5
9	0.5	0.8	1.2	1.3	2.1	2.2	3.6b	2.4	2.4	2.2	...c	1.1	0.5
10	0.5	1.1	1.3	1.3	2.1	2.2	2.3	2.3	2.1	...c	1.4	1.2	1.1
11	1.2	1.2	1.2	1.3	2.0	2.2	2.2	2.2	2.2	...c	...c	1.2	0.5
12	0.5	0.8	1.3	2.0	2.1	2.2	2.2	2.2	2.1	1.5	1.2	0.9	0.5
13	0.5	1.1	1.4	2.1	2.2	2.3	2.3	2.3	2.1	2.0	1.3	1.2	0.8
14	0.5	1.2	1.3	2.1	2.1	2.2	2.3	p6.5b	2.3	2.0	1.2	1.2	0.5
15	0.5	1.2	1.2	2.2	2.2	2.2	2.2	2.2	2.2	1.4	1.2	0.8	0.6
16	0.6	1.1	1.3	2.1	2.2	3.5	2.3	2.3	2.1	1.4	1.3	0.9	0.5
17	0.5	1.1	1.2	1.2	2.1	2.2	2.3	2.2	2.1	1.4	1.3	0.8	0.5
18	0.8	0.9	1.4	1.3	2.1	2.2	2.2	2.2	2.4	1.4	1.2	0.8	0.5
19	0.5	0.9	1.2	1.4	2.1	2.2	2.2	2.2	2.2	2.1	1.4	0.8	0.9
20	0.5	1.0	1.2	1.3	2.1	2.3	2.3	2.4	2.1	1.3	1.2	1.2	0.6
21	0.6	1.0	1.2	1.4	2.2	2.2	2.3	2.6	2.4	2.4	1.4	1.2	0.6
22	0.5	0.7	1.1	1.3	1.4	2.3	2.3	2.3	2.3	2.1	1.3	0.9	0.8
23	0.9	0.8	0.9	1.3	2.0	2.2	2.2	2.2	2.6	2.2	1.3	1.2	0.6
24	1.2	0.8	1.3	1.4	2.2	2.2	2.2	...c	...c	...c	...c	...c	...c
25	0.7	1.2	2.0	2.1	...	...	2.2	2.2	2.2	2.1	1.3	1.2	1.1
26	0.5	1.2	1.2	2.0	2.1	2.1	2.2	2.2	2.1	1.5	1.3	0.8	0.6
27	0.6	0.8	1.3	1.3	2.1	2.2	2.2	2.2	2.2	2.1	1.4	1.2	1.1
28	1.1	1.2	1.3	1.4	2.0	2.2	2.2	2.1	2.1	2.1	1.3	1.2	0.5
29	0.6	1.2	1.2	1.4	2.1	2.2	2.2	2.2	2.1	1.8	1.4	1.2	1.2
30	0.5	1.2	1.3	1.3	2.1	2.2	2.2	2.2	2.2	2.0	1.4	0.9	1.2
31	0.5	1.2	1.3	1.4	2.2	2.2	2.2	2.2	2.1	2.1	1.4	1.2	0.8
* MEAN	0.6	1.0	1.3	1.5	2.0	2.2	2.3	2.2	2.2	2.0	1.3	1.0	0.7

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2.2	3.0	3.4	3.7	3.9	4.1	4.1	4.0	3.8	3.7	3.4	2.9	2.0
2	2.1	2.8	3.3	3.7	3.9	4.1	4.1	4.1	3.9	3.6	3.3	2.8	1.9
3	2.2	2.9	3.8	4.0	4.1	4.1	4.1	3.9	3.7	3.5	2.5	2.9	2.0
4	2.1	3.0	3.2	3.9	4.1	4.1	4.2	4.0	3.6	3.7	3.4	2.9	2.1
5	2.2	2.9	3.6	3.8	4.0	4.1	4.4	4.1	3.7	...	3.4	3.0	2.0
6	1.8	2.5	3.5	3.8	4.0	4.3	4.2	4.0	3.9	3.7	3.5	3.0	2.0
7	1.4	2.2	3.9	3.7	4.0	4.2	4.2	4.1	3.8	3.6	3.5	2.9	2.0
8	1.8	2.5	3.5	3.8	4.0	4.2	4.2	4.2	4.1	3.9	3.4	2.9	1.9
9	1.8	2.9	3.4	3.7	4.0	4.2	4.4	4.3	4.1	3.9	...c	3.0	2.3
10	2.0	2.6	3.4	3.8	4.0	4.2	4.3	4.0	3.9	...c	3.3	3.0	2.0
11	2.1	2.9	3.4	3.8	4.0	4.1	4.3	4.2	4.2	...c	...c	3.4	2.0
12	2.3	3.0	3.5	3.7	4.0	4.2	4.3	4.2	4.0	3.8	3.5	3.0	2.0
13	2.1	2.5	3.5	3.8	4.0	4.2	4.3	4.3	4.1	3.8	3.5	3.0	2.0
14	2.0	2.9	3.4	3.7	3.9	4.1	4.4	...b	4.1	3.9	3.5	3.0	2.0
15	2.0	3.0	3.5	3.9	4.0	4.2	4.2	4.1	3.9	3.7	3.7	2.9	2.1
16	2.0	2.9	3.5	3.9	4.0	4.3	4.3	4.1	4.0	3.7	3.5	2.9	2.0
17	2.2	2.9	3.4	3.8	3.9	4.0	4.0	4.0	3.8	3.6	3.6	3.0	2.0
18	2.0	2.8	3.5	3.8	3.9	4.1	4.1	4.0	3.8	3.8	4.5	2.9	2.0
19	1.9	2.9	3.4	3.8	4.0	4.1	4.2	4.1	3.9	3.2	4.2	2.9	1.9
20	2.0	2.9	3.2	3.6	3.8	4.0	4.2	4.4	4.1	4.6	3.3	2.8	2.0
21	1.9	2.8	3.4	3.8	4.0	4.1	4.2	4.2	4.0	3.7	3.5	2.9	2.0
22	2.0	2.6	3.4	3.7	3.9	4.0	4.2	4.0	3.8	3.6	3.7	3.0	2.1
23	1.9	2.6	...c	3.7	3.9	4.0	4.3	4.2	4.0	3.8	3.5	2.9	2.1
24	1.9	2.8	3.4	3.7	3.9	4.3	4.3	...	...	...	...	...	...
25	1.9	2.9	3.5	3.9	...	...	4.2	4.1	4.0	3.6	3.6	3.1	2.2
26	1.9	2.8	3.4	3.6	3.9	4.1	4.2	4.0	3.7	3.4	3.3	2.9	1.9
27	2.0	2.8	3.3	3.8	4.0	4.2	4.3	4.2	4.0	3.8	3.5	2.9	2.0
28	1.9	2.8	3.4	3.7	4.0	4.2	4.2	4.1	4.0	3.8	3.4	2.9	2.0
29	2.0	2.8	3.2	3.7	3.9	4.1	4.1	4.0	3.9	3.7	3.4	2.9	2.0
30	1.9	2.8	3.4	3.7	4.0	4.1	4.2	4.1	3.9	3.2	3.4	2.9	2.0
31	1.9	2.7	3.3	3.6	3.9	4.1	4.1	4.2	4.0	3.7	3.5	2.9	2.1
* MEAN	2.0	2.8	3.4	3.8	4.0	4.1	4.2	4.1	3.9	3.7	3.5	3.0	2.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 55

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p7.1	p5.8	p5.6	p5.7	5.1	5.0	6.6	9.2	10.8	11.1	10.3	10.7	10.8	10.5	9.9	9.2	10.2	10.8	11.9	11.0	11.0	9.7	9.5	p11.9	9.1
2	p10.2	p8.5	8.1	7.6	p12.7	p11.9	p9.3	10.7	12.4	13.1	13.4	13.7	15.1	14.3	14.1	13.9	14.2	13.2	12.2	10.6	9.2	p10.0	p10.2	p10.3	11.6
3	p11.8	p10.0	p9.0	p8.3	p7.6	p8.2c	p8.4	11.0	12.4	12.7	12.5	12.7	13.6	13.0	14.4	14.0	14.1	14.1	14.2	13.5	11.6	10.0	10.6	10.4	11.6
4	9.9	9.9	10.0	8.8	8.0	...c	...c	...c	...c	...c	...c	...c	...c	12.0	12.7	13.2	13.2	13.2	13.4	12.6	10.2	p11.3	p10.0	p8.4	...
5	p7.5	6.2	6.3	6.6	6.3	5.4	7.0	10.0	11.7	13.3	13.0	12.3	11.0	11.8	12.5	12.8	13.0	13.3	14.1	14.4	13.7	13.7	13.1	10.4	10.8
6	7.0	4.5	4.7	5.1	6.3	5.6	6.6	10.2	12.0	13.0	11.3	11.0	10.7	10.3	10.6	11.3	12.2	12.8	12.5	11.7	11.1	12.3	11.2	9.9	9.7
7	9.0	p12.5	p12.6	p12.9	p12.5	p12.4	p12.3	p12.3	12.6	12.9	12.2	10.7	10.1	10.6	10.7	10.9	11.6	11.8	11.9	11.3	10.2	10.3	10.5	10.2	11.5
8	9.3	7.5	7.1	6.9	6.7	6.7	8.3	11.0	12.7	13.2	12.8	10.5	10.1	10.3	10.9	11.9	12.9	13.5	14.3	14.3	13.7	13.4	12.3	11.2	10.9
9	10.4	8.3	7.5	7.1	6.9	6.7	8.3	10.5	11.1	12.4	12.9	11.5	8.9	8.9	9.2	10.1	11.0	11.7	11.7	11.0	9.3	9.6	9.6	9.8	9.8
10	9.4	8.4	8.2	8.0	8.1	7.3	8.1	10.2	11.3	12.2	12.8	13.0	p12.7	11.8	11.0	12.2	12.6	13.0	p12.9	12.1	10.4	10.4	10.5	10.4	10.7
11	10.4	10.2	9.2	8.3	7.5	6.9	7.4	9.8	11.5	12.0	11.5	10.0	9.5	9.5	9.5	9.5	10.0	10.0	9.8	9.6	6.9	p11.9	p10.1	p11.5	9.7
12	p8.6	p7.2	5.6	5.1	4.6	4.1	5.9	9.0	10.5	12.0	12.3	12.3	12.2	11.8	12.5	12.8	13.0	12.9	13.4	12.6	11.2	p13.7	p12.2	p11.9	10.3
13	11.7	p11.9	9.5	9.0	8.8	6.6	6.2	8.7	10.0	10.5	10.4	10.3	10.7	11.0	11.4	11.7	11.5	11.5	10.5	10.1	9.7	9.1	8.9	9.2	10.0
14	10.1	9.5	7.4	7.1	7.0	6.7	6.8	9.2	11.0	11.8	12.3	12.3	11.7	12.1	12.3	12.5	12.8	13.0	12.3	11.4	9.9	p12.7	p12.5	12.5	10.7
15	p12.2	10.7	9.5	8.5	7.9	8.1	8.7	10.1	11.1	11.6	11.0	10.6	11.0	11.5	11.7	11.8	12.2	12.0	11.5	10.5	9.1	8.8	9.0	9.8	10.4
16	10.3	10.0	9.8	9.0	8.0	7.3	7.9	10.1	11.7	12.5	12.8	11.8	...c	...c	...c	12.2	11.9	12.0	12.0	11.5	10.4	10.0	9.5	10.1	...
17	9.6	9.0	8.8	7.6	7.0	7.1	8.4	10.5	11.0	11.5	10.8	10.8	11.1	11.0	11.4	11.7	11.7	11.5	10.5	9.9	8.8	p11.5	p11.9	p11.9	10.2
18	9.2	8.6	7.0	6.4	6.2	6.1	7.2	9.4	11.2	12.2	12.6	11.8	10.9	11.3	11.8	12.5	12.8	12.7	12.3	11.3	9.9	9.4	9.3	9.9	10.1
19	9.3	7.6	6.7	6.3	6.0	5.8	6.5	9.4	11.3	12.5	12.8	11.9	10.6	10.3	10.5	10.7	10.7	10.0	11.2	10.7	9.4	9.4	9.7	10.0	9.6
20	10.4	10.8	8.9	7.0	5.6	5.0	6.5	9.3	11.2	11.7	11.1	9.6	9.3	9.7	10.0	10.4	11.2	11.5	10.8	9.6	p12.5	p12.0	p12.2	p11.2	9.9
21	p9.5	7.9	6.6	5.3	4.5	3.8	5.6	8.8	10.2	11.5	12.6	12.7	12.4	10.8	10.4	10.7	10.8	11.4	11.2	10.2	9.1	p12.5	p11.5	p10.0	9.6
22	p8.5	7.0	6.0	5.2	4.4	3.3	5.3	8.8	11.1	12.0	11.9	10.3	9.8	9.7	9.9	10.0	10.3	10.5	10.8	9.9	p12.5	p12.3	p12.0	p12.0	9.3
23	p10.5	p9.2	7.2	6.0	5.4	4.6	6.3	9.6	11.0	12.2	13.1	12.6	12.5	11.9	11.5	11.5	11.4	10.5	10.3	9.8	p12.3	p12.5	p12.0	p11.5	10.2
24	8.0	7.3	6.8	7.0	7.0	6.9	7.0	8.0	10.3	12.3	12.8	13.7	13.7	12.3	10.0	10.4	10.6	9.7	10.1	9.7	9.8	9.3	9.2	9.9	9.7
25	7.0	6.6	6.0	5.6	6.1	6.0	5.3	9.4	...	13.6	13.7	13.8	12.7	12.6	12.6	12.3	11.3	10.2	10.0	9.4	8.7	9.7	10.0	8.3	...
26	8.4	7.5	6.7	6.0	6.3	5.8	6.0	9.8	12.2	13.3	12.9	12.3	11.3	11.0	11.0	11.4	11.3	11.2	10.8	10.2	9.0	9.5	p12.0	p10.5	9.8
27	10.4	9.2	7.6	5.6	5.1	4.2	5.7	9.4	11.7	12.8	13.1	12.5	11.8	11.1	10.3	10.3	10.0	9.7	9.5	8.8	p12.7	p12.0	p11.7	p11.9	9.9
28	p9.7	p8.9	p8.4	p6.2	5.5	5.6	7.4	10.2	12.0	13.0	13.4	12.9	10.9	10.6	10.8	10.4	9.7	9.4	9.5	9.7	8.7	8.6	8.6	9.0	9.5
29																									
30																									
31																									
MEAN*	9.5	8.6	7.7	7.1	6.9	6.4	7.2	9.8	11.4	12.3	12.3	11.8	10.9	10.8	10.8	11.5	11.7	11.7	11.6	11.0	10.4	10.9	10.7	10.5	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 56

FEBRUARY 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1939

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	250	250	250	240	240	230	270	240	270	300	310	330	330	330	300	280	270	250	270	320	380	390	380	370	294
2	300	250	270	290	300	290	240	270	280	280	290	280	310	290	280	270	260	250	280	350	390	370	290	260	289
3	270	250	250	260	250	230	270	240	270	280	280	280	310	290	290	280	270	250	280	330	370	320	270	270	278
4	250	240	230	240	220	...c	...c	...c	...c	...c	...c	...c	...c	290	300	290	250	240	280	340	350	340	400	350	...
5	250	250	250	240	220	220	250	260	270	280	290	290	300	290	290	290	270	250	260	290	270	260	240	210	262
6	210	250	310	340	340	250	260	240	280	280	280	290	300	290	290	280	270	260	270	340	280	290	330	340	286
7	350	330	330	300	270	230	260	270	270	280	300	300	290	290	310	260	250	250	270	330	320	250	230	220	282
8	220	250	260	260	230	230	240	250	260	280	290	300	280	290	260	250	250	270	270	300	300	250	240	230	261
9	280	240	270	270	260	230	240	230	260	270	290	310	300	310	380	300	280	260	270	360	350	270	250	250	280
10	240	250	290	280	230	220	250	230	260	270	300	310	320	290	260	260	260	270	270	330	330	300	280	290	275
11	250	250	240	230	230	220	260	260	270	300	320	320	330	320	320	300	260	250	270	350	410	450	360	270	293
12	220	220	230	230	240	230	250	250	260	270	300	310	300	300	300	290	280	270	260	320	350	420	350	250	279
13	220	230	230	230	220	210	250	260	290	300	310	310	320	350	310	310	200	260	250	300	320	280	290	240	270
14	220	220	220	220	210	220	260	260	270	280	310	320	310	310	300	300	270	270	260	300	340	260	300	250	270
15	260	290	250	270	270	270	260	260	280	300	300	310	310	310	300	300	300	270	280	320	290	250	260	230	281
16	230	240	230	240	230	230	260	260	260	290	300	300	...c	...c	...c	310	270	260	260	320	330	300	250	250	...
17	260	250	220	230	220	240	260	260	280	300	300	300	300	300	300	300	290	270	260	340	300	330	280	230	276
18	220	220	230	230	220	230	260	260	260	260	300	300	300	310	300	250	280	270	270	310	310	290	250	210	264
19	210	230	220	230	250	220	250	250	260	290	290	290	290	300	290	260	280	270	260	330	330	260	270	250	266
20	240	230	230	230	240	220	250	250	270	260	290	310	320	310	280	250	260	280	270	310	350	330	270	230	270
21	230	230	230	230	220	230	260	240	260	270	290	310	310	300	260	270	260	270	260	330	370	270	250	220	265
22	210	220	220	220	220	220	260	260	270	280	280	290	310	300	290	280	270	270	270	320	350	340	250	280	270
23	240	220	230	230	230	240	260	250	270	270	280	280	300	300	280	270	270	280	270	350	350	300	300	230	271
24	230	240	230	230	240	230	250	260	260	270	290	290	290	290	270	270	270	260	290	350	280	280	220	220	263
25	250	260	280	330	360	310	300	260	...	270	260	270	280	290	260	260	260	260	280	330	310	300	250	230	...
26	230	230	240	240	220	210	240	240	240	260	270	270	280	270	240	260	270	260	270	340	370	300	350	260	265
27	220	210	220	220	220	230	260	250	260	260	270	...	250	270	270	280	280	270	300	310	200	200	210	210	...
28	230	250	220	210	260	250	270	250	270	270	270	280	270	290	280	260	260	280	270	340	350	300	270	230	268
29																									
30																									
31																									
MEAN*	242	243	246	249	245	235	257	252	267	278	291	298	300	299	289	278	266	263	270	327	330	303	282	253	273

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 57

FEBRUARY 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1939

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	5.1	5.5	5.6	5.5	5.5	5.4	5.2	4.8	4.3	...	...
2	...	4.5	5.3	5.3	5.6	5.3	5.5	5.4	5.2	5.1	4.2	...	...
3	...	...	5.0	5.5	5.5	5.6	5.7	5.4	5.5	5.1	4.5	...	...
4	...c	...c	...c	...c	...c	...c	...c	5.3	5.4	5.2	4.4	...	...
5	...	4.2	5.0	5.2	5.4	5.5	5.5	5.4	5.3	5.3	4.5	...	...
6	...	...	5.1	5.3	5.3	5.4	5.5	5.5	5.4	5.0	4.6	...	...
7	...	4.6	5.0	5.3	5.5	5.3	5.3	5.3	5.5	4.8	4.2	...	...
8	...	4.7	4.8	5.3	5.2	5.2	5.0	5.1	4.9	4.7	4.6	4.3	...
9	...	...	5.0	5.1	5.2	5.3	5.3	5.3	5.5	5.1	4.8	3.8	...
10	...	...	4.8	5.1	5.4	5.3	5.4	5.2	5.0	5.0	4.3	4.0	...
11	...	4.2	5.0	5.4	5.5	5.6	5.4	5.4	5.5	5.1	4.5	3.7	...
12	...	4.7	4.8	5.2	5.4	5.6	5.5	5.5	5.4	5.3	5.0	4.8	...
13	...	4.2	5.0	5.4	5.5	5.5	5.4	5.7	5.4	5.4	4.5	3.8	...
14	...	4.2	5.1	5.2	5.5	5.6	5.5	5.5	5.4	5.3	4.5	4.2	...
15	...	4.5	5.0	5.5	5.4	5.5	5.6	5.5	5.4	5.2	5.0	3.8	...
16	...	4.8	5.0	5.3	5.4	5.5	...c	...c	...c	5.5	4.9	3.8	...
17	...	4.7	5.0	5.5	5.4	5.6	5.5	5.4	5.5	5.4	4.9	4.0	...
18	...	4.7	4.7	5.0	5.3	5.4	5.4	5.3	5.3	5.1	4.7	3.9	...
19	...	5.0	5.0	5.4	5.3	5.2	5.3	5.3	5.1	4.8	4.8	4.3	...
20	...	4.5	5.1	4.9	5.1	5.3	5.4	5.3	5.0	4.7	4.3	4.3	...
21	...	4.4	4.9	5.1	5.3	5.4	5.4	5.3	5.1	4.9	4.5	4.2	...
22	...	4.4	4.9	5.2	5.4	5.4	5.4	5.4	5.2	5.1	4.7	4.5	...
23	...	4.8	5.2	5.2	5.5	5.4	5.4	5.4	5.1	4.8	4.7	4.3	...
24	...	4.6	5.0	5.2	5.5	5.5	5.5	5.4	5.1	4.9	4.3	...	...
25	...	5.0	...	5.3	4.9	5.5	5.6	5.4	4.8	5.0	4.5	3.9	...
26	...	4.2	4.7	5.2	5.4	5.5	5.4	5.2	5.0	4.9	4.8	4.0	...
27	...	4.7	5.1	5.1	5.4	...	5.5	5.4	5.5	5.1	4.8	4.3	...
28	...	5.0	5.2	5.4	5.4	5.4	5.4	5.4	5.1	4.8	4.4	4.1	...
29													
30													
31													
* MEAN	...	4.6	5.0	5.3	5.4	5.4	5.4	5.4	5.2	5.0	4.6	4.1	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	220	210	210	210	200	200	210	...	...
2	...	200	230	220	220	200	220	200	200	200	220	...	...
3	...	...	230	220	220	220	210	200	200	200	230	...	...
4	...c	...c	...c	...c	...c	...c	...c	210	200	200	220	...	...
5	...	240	230	210	210	210	210	210	200	210	230	...	...
6	...	...	230	210	210	220	210	210	220	230	240	...	...
7	...	240	230	210	210	200	200	200	200	210	230	...	...
8	...	230	220	210	200	180	180	180	180	190	230	230	...
9	...	...	220	220	200	200	200	190	190	200	210	230	...
10	...	...	230	220	200	200	200	190	200	200	220	230	...
11	...	230	230	220	220	210	205	200	210	205	200	230	...
12	...	230	230	220	210	200	200	200	200	200	215	230	...
13	...	240	230	220	220	210	200	200	210	200	210	210	...
14	...	240	230	220	210	200	200	210	200	200	220	230	...
15	...	230	230	220	210	200	210	200	200	200	220	230	...
16	...	240	220	220	200	200	...c	...c	...c	210	230	230	...
17	...	230	220	200	200	200	200	200	200	210	220	230	...
18	...	240	230	210	200	200	200	210	210	210	220	230	...
19	...	230	220	210	200	200	200	190	200	210	220	230	...
20	...	230	220	200	200	200	200	190	190	200	210	230	...
21	...	230	220	210	210	200	200	190	190	200	220	240	...
22	...	230	220	210	210	210	200	190	190	200	220	230	...
23	...	240	230	220	210	210	200	200	200	200	210	230	...
24	...	230	230	220	210	210	210	210	210	220	230	...	...
25	...	240	220	210	210	210	210	180	200	230	240	240	...
26	...	230	220	200	200	200	200	190	190	220	220	230	...
27	...	230	230	220	210	...	210	210	190	210	230	230	...
28	...	230	220	220	220	210	200	210	200	200	210	240	...
29													
30													
31													
* MEAN	...	232	226	214	209	204	203	199	199	206	221	230	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 58

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.1	0.8	1.2	1.4	1.2	2.2	2.2	2.2	2.2	2.1	1.3	1.2	1.2	1.9	2.8	3.4	3.7	3.0	4.0	4.2	4.1	4.0	3.7	3.4	2.9	2.0
2	0.5	0.7	1.3	1.4	2.1	2.2	2.2	2.3	2.2	2.1	1.4	1.2	1.1	1.2	2.8	3.4	3.7	4.0	4.1	4.2	4.0	4.3	3.7	3.4	2.9	2.0
3	0.6	0.8	1.2	1.4	2.2	2.3	2.4	2.2	2.2	2.2	2.0	1.4	0.6	1.2	2.7	3.4	3.8	4.0	4.2	4.2	4.2	4.0	3.8	3.4	2.9	2.0
4	...c	...c	...c	...c	...c	...c	...c	2.2	2.2	2.2	1.4	1.2	0.6	...c	...c	...c	...c	...c	...c	...c	4.1	3.9	3.7	3.6	2.9	2.0
5	0.6	0.8	1.1	1.3	1.4	2.1	2.2	2.3	2.3	1.3	1.3	1.2	0.8	1.8	2.8	3.4	3.7	3.9	4.1	4.2	4.1	4.0	3.7	3.5	2.8	2.0
6	0.5	1.0	1.2	1.3	2.1	2.2	2.2	2.2	2.2	2.2	2.0	1.4	0.8	1.8	2.7	3.4	3.8	3.9	4.1	4.1	4.0	3.9	3.8	3.4	2.8	1.9
7	0.6	0.8	1.3	1.3	2.1	2.1	2.2	2.1	2.1	2.1	1.3	1.2	1.1	1.8	2.6	3.2	3.6	3.8	4.0	4.1	4.0	3.8	3.6	3.6	2.8	1.9
8	0.6	1.2	1.2	1.3	1.5	2.1	2.1	2.2	2.1	2.1	1.5	1.3	0.6	1.8	2.7	3.4	3.6	3.8	4.0	4.0	4.0	3.9	3.6	3.4	2.8	1.9
9	0.5	0.7	1.3	1.4	1.5	2.1	2.2	2.1	2.1	1.5	1.2	1.2	0.8	1.9	2.6	3.4	3.7	3.8	4.0	4.1	4.0	3.8	3.6	3.3	2.8	1.9
10	0.8	1.2	1.3	1.2	1.5	2.1	2.2	2.1	2.1	1.4	1.4	1.2	0.6	1.7	2.6	3.2	3.8	3.8	4.0	4.1	4.0	3.9	3.7	3.4	2.8	1.9
11	0.5	1.2	1.3	1.3	2.0	2.1	2.1	2.1	2.1	1.3	1.3	0.8	0.7	1.7	2.7	3.3	3.6	3.9	4.0	4.0	4.0	3.8	3.6	3.0	2.5	2.0
12	0.7	1.1	0.9	1.2	1.4	2.1	2.1	2.2	2.2	2.2	1.3	0.7	0.7	1.8	2.6	3.5	3.5	3.9	4.1	4.2	4.1	4.0	3.8	3.4	2.9	2.0
13	1.2	1.2	1.2	2.1	2.1	2.1	2.2	2.2	2.1	2.0	1.3	1.2	1.2	1.8	2.5	3.2	3.7	3.9	4.0	4.0	4.0	3.9	3.7	3.3	2.7	1.9
14	0.6	1.2	1.2	1.4	2.0	2.2	2.2	2.2	2.1	1.4	1.3	1.2	1.2	1.8	2.5	3.2	3.6	3.8	4.0	4.2	4.0	3.8	3.7	2.0	2.8	2.6
15	0.5	0.6	1.2	1.4	1.4	2.1	2.2	2.3	2.2	2.1	1.2	0.8	1.1	1.6	2.7	3.2	3.5	3.8	4.0	4.1	4.1	3.9	3.7	3.1	2.7	1.6
16	0.6	1.2	1.2	1.4	2.1	2.1	...c	...c	...c	2.0	1.4	0.9	1.1	1.8	2.6	3.2	3.5	3.8	3.9	...c	...c	...c	3.7	3.2	2.7	1.8
17	0.5	0.8	0.9	1.2	1.4	2.0	2.0	2.1	2.0	1.4	1.3	0.8	0.6	1.7	2.5	3.2	3.6	3.8	4.0	4.1	4.0	3.8	3.6	2.4	2.6	1.8
18	0.5	0.8	1.2	1.2	1.3	1.3	2.0	2.0	1.3	1.3	1.2	1.2	0.8	1.6	2.8	3.1	3.6	3.8	4.0	4.0	4.0	3.8	3.6	3.2	2.7	1.8
19	0.5	1.2	1.2	1.3	1.3	2.1	2.2	2.2	2.1	2.1	1.4	1.2	1.2	1.7	2.6	3.3	3.6	3.8	4.0	4.1	4.0	3.8	3.6	3.2	3.7	1.9
20	0.5	0.5	1.2	1.2	1.3	1.3	2.1	2.1	2.1	1.3	1.2	1.2	0.8	1.6	2.6	3.3	3.6	3.8	4.0	4.1	4.0	3.9	3.7	3.4	2.8	1.8
21	0.6	1.2	1.2	1.3	1.3	2.1	2.1	2.1	1.3	1.1	1.2	1.2	0.6	1.7	2.7	3.2	3.7	3.8	4.0	4.0	4.0	3.9	3.7	3.4	3.8	1.9
22	0.5	1.1	1.2	1.2	2.1	2.1	2.2	2.1	2.0	2.0	1.3	0.8	0.7	1.7	2.7	3.4	3.7	3.9	4.1	4.2	4.1	4.0	3.8	3.4	2.8	1.9
23	0.6	1.2	1.3	1.3	1.4	2.1	2.2	2.2	2.1	1.3	1.2	1.2	1.1	1.9	2.8	3.4	3.7	3.9	4.2	4.3	4.1	4.0	3.7	3.4	2.6	2.0
24	0.5	1.1	1.2	1.3	1.4	2.2	2.2	2.3	2.2	2.1	1.2	1.2	1.2	1.7	2.7	3.6	3.7	3.9	4.2	4.3	4.3	4.0	3.7	3.4	2.7	1.8
25	0.5	1.2	...	1.3	2.1	2.2	2.2	2.2	2.1	2.0	1.2	1.2	0.6	1.8	2.6	...	3.7	4.0	4.1	4.3	4.2	4.0	3.7	3.4	2.8	1.9
26	0.5	0.7	1.2	1.2	1.3	1.4	1.3	2.2	2.2	2.2	1.2	1.2	1.1	1.8	2.8	3.5	3.7	4.0	4.3	4.3	4.2	4.1	3.8	3.5	2.8	2.0
27	1.1	1.2	1.2	2.1	2.2	...	2.2	2.2	2.2	2.2	1.2	1.2	1.2	1.8	2.8	2.9	3.8	4.0	...	4.2	4.2	4.1	3.8	3.4	2.8	1.9
28	0.5	1.2	1.2	1.2	2.1	2.1	2.2	2.2	2.1	2.1	1.3	1.2	1.1	1.8	2.8	3.5	3.7	4.0	4.1	4.2	4.2	4.0	3.7	3.4	2.9	1.9
29																										
30																										
31																										
* MEAN	0.6	1.0	1.2	1.4	1.7	2.1	2.1	2.2	2.1	1.8	1.3	1.1	0.9	1.7	2.7	3.3	3.7	3.8	4.1	4.1	4.1	3.9	3.7	3.3	2.8	1.9

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 59

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1939

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	8.4	7.2	6.6	p8.7	p7.5	6.0	8.2	10.8	11.7	...c	12.4	12.3	12.9	13.0	12.8	12.6	11.6	10.2	9.2	9.1	9.2	9.4	9.0	8.2	...
2	8.7	9.0	7.7	8.5	9.3	8.8	9.3	9.9	11.9	13.1	13.7	13.3	12.8	12.0	11.5	11.2	11.3	11.6	11.2	10.3	9.0	p12.6	9.1	8.7	10.6
3	8.3	8.4	8.4	8.4	9.0	6.0	6.3	9.8	12.1	13.1	13.3	12.8	12.6	12.5	12.0	11.9	11.5	11.1	10.8	10.0	9.0	8.7	8.8	9.5	10.2
4	p12.2	10.3	7.8	8.0	8.8	8.5	10.1	12.7	13.6	13.3	12.3	10.5	11.2	11.6	11.8	12.2	12.5	12.4	11.5	10.1	9.4	9.4	10.1	10.0	10.8
5	9.8	9.3	6.5	5.3	4.4	3.8	5.8	9.9	11.7	12.8	12.6	10.8	10.5	10.9	11.1	11.7	12.4	13.0	11.9	10.1	8.8	9.7	11.2	11.3	9.8
6	11.2	8.8	7.5	5.8	4.7	3.2	5.5	9.5	11.1	11.8	12.0	10.8	10.8	10.5	10.5	10.9	10.8	11.0	10.8	10.1	8.5	p12.0	p12.4	p11.9	9.7
7	p12.6	9.7	7.3	5.7	4.6	4.1	5.9	9.2	11.0	11.7	11.1	10.1	10.0	10.1	10.5	11.0	11.2	11.4	11.4	10.5	9.4	p13.0	p12.4	10.5	9.8
8	p12.3	p11.1	p9.9	p9.0	p12.2	7.6	8.6	10.6	11.8	12.1	11.5	9.9	9.8	9.8	10.3	10.8	11.5	11.7	11.7	10.9	p13.2	p13.0	p13.1	p13.4	11.1
9	p13.2	p12.7	p11.0	7.1	4.8	4.4	4.9	8.8	10.2	11.6	12.4	11.5	10.9	10.7	11.2	11.6	11.7	11.2	11.3	10.8	10.7	9.9	p12.0	10.0	10.2
10	p11.9	8.5	6.6	p7.2	5.2	3.9	5.4	8.8	10.5	11.9	12.2	11.5	10.9	10.4	10.1	10.3	10.4	10.4	10.7	10.7	9.4	8.9	9.8	10.6	9.4
11	10.9	9.3	5.6	4.8	4.6	3.9	5.5	8.8	10.8	11.9	11.9	10.8	9.8	10.7	11.3	11.6	11.3	11.1	9.9	9.0	9.5	8.5	8.1	8.5	9.1
12	8.6	7.4	6.7	5.7	5.6	5.5	6.5	9.4	10.9	11.7	12.7	11.8	10.9	11.0	10.7	10.7	10.7	10.6	10.4	10.3	10.6	10.9	11.1	11.2	9.6
13	10.6	9.7	6.7	4.1	2.5	2.0	5.9	8.5	10.4	10.5	11.9	11.7	10.6	10.3	10.1	10.1	6.9	10.4	10.1	10.0	9.6	9.1	8.5	p12.4	8.9
14	p11.6	9.7	7.1	5.4	4.3	3.4	5.0	8.2	10.3	11.9	12.6	12.4	12.0	10.9	10.5	10.1	9.9	10.1	9.9	9.4	8.2	p12.5	p12.0	p10.3	9.5
15	8.4	p7.6	5.8	5.5	4.7	4.7	5.5	8.9	10.6	12.0	12.9	12.8	11.5	10.8	11.5	11.8	11.5	11.0	10.1	9.4	8.8	9.2	10.2	10.2	9.4
16	10.4	10.4	7.3	4.2	3.0	2.3	5.1	8.7	10.5	11.6	12.3	13.5	13.2	11.8	11.4	11.2	11.1	11.1	10.9	10.2	9.0	9.9	10.0	10.5	9.6
17	10.1	8.0	6.7	5.8	5.6	5.4	6.2	8.6	10.5	11.1	11.3	11.0	11.5	11.4	11.3	11.2	11.1	10.6	9.9	8.6	7.9	p9.6	p12.0	p12.0	9.5
18	p8.4	p8.2	6.5	5.7	4.4	3.8	5.4	8.8	10.6	11.9	12.1	11.9	11.1	11.3	11.6	12.3	12.3	12.1	11.9	11.3	10.6	11.0	11.2	11.8	9.8
19	10.9	p12.1	6.0	2.7	1.4	1.2	4.8	4.5	8.5	10.6	11.4	11.5	11.1	11.2	11.1	11.7	12.1	12.3	12.3	12.2	10.8	p12.0	p13.0	p12.5	10.5
20	p11.5	p11.4	7.2	6.2	5.4	4.6	5.6	9.1	10.5	10.9	10.0	10.0	10.0	10.8	10.9	11.6	11.6	11.5	11.8	10.9	9.0	p12.8	p12.7	p12.2	9.9
21	p11.4	p8.2	p6.8	p4.9	3.2	2.9	5.1	8.4	10.5	12.2	12.3	11.5	10.6	11.0	11.9	12.5	12.8	12.3	11.5	p13.4	p13.5	p12.7	p12.7	p13.3	10.2
22	p12.6	p11.9	p8.3	p7.4	6.5	6.9	8.0	10.9	12.8	13.6	13.7	12.6	10.3	10.6	10.6	10.4	10.9	10.8	10.5	10.3	10.2	10.1	9.4	8.0	10.3
23	8.1	8.3	6.9	6.3	5.9	4.8	5.8	9.7	12.0	12.8	12.1	10.2	10.6	11.2	11.5	11.5	11.2	11.2	11.1	10.9	11.0	11.6	10.9	10.4	9.8
24	9.6	8.1	6.0	3.8	2.8	2.3	5.1	9.2	11.2	12.0	11.8	11.3	11.5	11.3	11.1	10.9	11.0	10.5	10.1	8.8	7.7	9.4	p12.1	12.0	9.2
25	p13.4	10.6	5.7	p5.3	4.8	4.0	5.4	9.5	11.5	12.2	11.6	10.3	9.8	10.1	10.4	11.0	11.0	11.0	10.8	9.5	p13.0	9.0	p12.6	10.2	9.7
26	9.6	8.5	5.8	p4.8	7.6	1.8	5.1	9.0	10.7	12.0	12.2	11.7	10.3	10.3	10.4	10.9	11.7	12.0	12.0	10.9	9.6	10.7	p13.2	11.7	10.2
27	12.4	12.6	8.1	6.3	5.2	4.4	5.9	9.4	11.2	12.6	12.6	11.4	10.1	10.3	10.1	10.1	10.7	11.5	11.0	10.2	10.1	8.4	8.4	9.0	9.7
28	9.1	8.2	6.3	5.8	5.4	4.9	6.7	9.3	10.8	12.0	...c	12.8	12.0	12.0	12.0	11.6	11.1	11.6	11.9	11.9	...c	13.9	13.4	12.1	...
29	11.5	9.7	6.9	5.8	6.1	5.8	6.7	9.8	11.9	13.9	13.9	12.9	12.9	12.7	12.4	11.9	11.2	10.9	11.0	9.8	9.4	9.8	p12.2	9.0	10.3
30	7.8	7.5	6.2	6.5	6.3	5.8	6.6	9.6	11.6	12.8	...c	13.2	...c	12.1	11.8	11.8	10.9	10.3	10.4	9.8	9.9	9.6	9.1	p12.0	...
31	8.8	8.4	7.3	6.2	5.9	5.8	6.6	9.6	11.4	11.2	11.6	10.9	11.2	11.8	12.2	12.4	12.1	11.5	10.3	8.6	8.3	8.1	8.1	p10.3	9.5
MEAN*	10.5	9.4	7.1	6.0	5.8	5.5	6.2	9.3	11.1	12.1	12.2	11.6	11.1	11.1	11.2	11.3	11.2	11.2	10.9	10.3	9.5	10.5	10.9	10.8	

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 60

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	250	260	240	230	220	260	250	260	...c	270	280	280	280	280	280	260	280	280	320	300	300	270	260	...
2	270	280	300	300	280	310	270	250	260	270	270	280	280	290	290	270	260	260	270	370	390	290	230	230	282
3	220	210	230	220	220	220	270	260	260	260	270	270	280	280	260	270	260	250	280	360	360	260	230	250	260
4	230	220	260	260	230	240	260	250	260	270	280	280	270	280	260	250	260	240	270	310	290	250	230	230	258
5	220	200	230	230	230	230	230	250	260	270	280	280	280	280	290	260	260	260	270	320	300	240	230	210	255
6	200	220	230	220	210	220	240	250	260	270	280	290	280	270	270	270	260	230	260	350	310	290	270	240	258
7	210	200	220	230	220	220	250	250	260	270	300	290	290	290	300	280	260	240	270	320	340	300	240	230	262
8	240	240	240	260	270	230	240	250	260	280	290	300	310	300	280	260	260	250	280	350	410	270	250	260	274
9	260	250	210	220	230	280	270	260	270	290	300	310	300	280	300	270	250	250	280	330	290	300	280	230	271
10	220	240	240	220	230	210	250	250	260	280	280	300	300	310	300	250	260	280	250	310	380	330	250	210	267
11	200	200	230	240	220	230	260	250	260	280	300	330	310	300	260	270	270	250	280	320	330	310	250	230	266
12	230	210	240	250	240	220	250	250	260	280	230	300	300	300	300	300	260	250	270	310	260	220	210	260	258
13	220	200	210	220	230	250	260	250	270	270	300	310	300	300	290	260	260	240	260	330	310	340	260	240	266
14	230	200	210	220	220	240	260	260	260	270	290	300	300	310	300	290	260	250	280	350	400	340	290	230	273
15	200	200	220	220	230	220	250	250	260	270	290	310	300	290	300	280	260	250	270	340	330	270	260	260	264
16	210	200	220	220	230	250	260	250	260	280	280	300	290	290	300	280	270	250	270	340	330	310	240	240	265
17	220	200	230	240	260	260	280	260	260	280	280	290	300	290	290	280	250	240	270	340	340	290	280	220	269
18	230	230	230	230	220	240	260	250	270	280	300	310	320	300	290	280	270	270	270	350	330	270	250	240	270
19	220	200	210	220	280	280	260	250	260	280	290	300	300	300	300	290	270	270	270	330	320	270	240	230	268
20	210	220	240	230	230	220	260	270	280	280	300	300	300	300	290	270	260	250	270	370	400	330	270	240	275
21	200	210	220	220	240	230	260	260	260	270	300	300	310	300	280	280	280	260	290	400	410	340	260	280	278
22	230	200	230	260	260	250	260	260	260	270	290	290	280	300	300	280	260	250	270	320	300	240	240	230	264
23	220	210	240	250	230	230	260	250	260	270	300	300	300	290	280	250	250	230	280	310	250	220	220	210	255
24	210	210	230	240	240	260	260	260	260	270	300	300	300	300	300	280	260	250	280	380	390	230	210	220	268
25	200	200	220	240	240	230	250	250	260	270	300	290	300	300	300	270	270	250	280	370	390	240	250	230	267
26	210	220	220	220	240	270	260	250	260	260	290	300	300	290	280	270	260	240	290	390	340	270	240	220	266
27	220	220	220	240	240	240	260	260	260	280	290	310	310	300	280	260	270	...	290	350	340	260	220	210	...
28	230	230	240	230	230	230	240	240	250	270	...c	300	300	290	280	270	270	260	270	...c	...c	220	220	210	...
29	215	220	240	260	260	250	290	240	260	270	280	290	290	280	280	270	280	250	280	360	400	300	250	240	273
30	230	220	260	240	240	220	250	260	260	270	...c	280	...c	290	270	260	260	260	250	290	300	250	240	210	...
31	210	220	230	230	220	210	260	260	260	280	280	280	300	290	280	270	270	260	280	320	300	250	240	220	259
* MEAN	220	217	232	236	237	239	258	253	261	274	287	296	296	293	286	272	263	244	273	340	338	278	246	232	265

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 61

MARCH 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1939

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.2	5.2	...c	5.4	5.5	5.6	5.4	5.4	4.9	4.3	4.3	...
2	...	4.1	5.1	5.3	5.3	5.6	5.5	5.5	5.5	5.1	4.5	3.8	...
3	...	5.0	5.1	5.1	5.2	5.4	5.4	5.1	5.0	5.1	4.6	...	...
4	...	4.6	5.0	5.3	5.3	5.4	5.4	5.3	5.0	4.6	4.3	...	...
5	...	5.0	4.6	5.4	5.4	5.4	5.4	5.5	5.4	4.9	4.3	3.7	...
6	...	5.0	5.4	5.4	5.4	5.5	5.2	5.1	5.1	4.8	4.4	...	...
7	...	4.7	4.7	5.1	5.4	5.3	5.3	5.3	5.3	5.0	4.7	...	...
8	...	4.6	5.1	5.2	5.4	5.3	5.3	5.2	4.9	4.7	4.2	...	...
9	...	4.5	5.1	5.2	5.3	5.3	5.3	5.2	5.4	4.7	4.5	4.0	...
10	...	5.0	4.8	5.0	5.3	5.5	5.3	5.4	5.2	4.6	4.4	4.3	...
11	...	5.0	4.6	5.0	5.3	5.3	5.3	5.4	5.3	4.6	4.3	...	...
12	...	4.7	4.8	5.1	5.4	5.3	5.2	5.2	5.0	4.4	4.4	...	...
13	...	4.9	5.2	5.3	5.1	5.0	5.0	4.6	4.2	4.6	4.2	...	...
14	...	4.7	5.0	4.9	5.2	5.4	5.4	5.4	[illegible]	4.9	4.8	...	...
15	...	4.7	4.9	5.0	5.2	5.4	5.1	5.3	5.2	4.8	4.2	...	...
16	...	4.6	5.2	5.2	5.3	5.4	5.4	5.3	5.2	4.9	4.6	...	...
17	...	4.6	5.0	5.1	5.3	5.4	5.4	5.2	5.0	4.8	4.7	...	...
18	...	4.3	5.1	5.2	5.4	5.4	5.4	5.2	5.3	5.0	4.5	4.3	...
19	...	4.1	5.0	5.2	5.3	5.3	5.3	5.2	5.2	5.0	4.2	...	...
20	...	4.2	5.1	5.2	5.4	5.3	5.3	5.3	5.0	4.9	4.3	...	...
21	...	4.2	4.8	5.1	5.5	5.6	5.6	5.5	5.1	5.0	4.9	...	...
22	...	4.7	5.1	5.2	5.4	5.4	5.4	5.3	5.3	5.0	4.6	...	...
23	...	5.1	5.0	5.3	5.4	5.5	5.6	5.4	5.1	4.6	4.4	...	...
24	...	4.5	5.1	5.3	5.4	5.6	5.5	5.5	5.4	5.2	4.2	...	...
25	...	4.2	4.8	5.0	5.4	5.4	5.3	5.3	5.3	5.0	4.6	...	...
26	...	5.0	5.2	5.2	5.4	5.5	5.3	5.1	5.1	5.0	4.6	...	...
27	...	4.6	4.8	5.2	5.3	5.3	5.4	5.2	4.9	4.4	4.7	...	...
28	...	...	4.3	5.0	...c	5.5	5.5	5.3	5.0	4.8	4.6	...	...
29	...	...	4.7	5.0	5.4	5.4	5.5	5.2	5.2	4.7	4.5	...	...
30	...	4.6	5.1	5.2	...c	5.4	...c	5.3	5.2	4.3	4.2	...	...
31	...	4.5	4.8	5.2	5.4	5.4	5.3	5.2	5.0	5.0	4.6	...	...
* MEAN	...	4.6	5.0	5.2	5.3	5.4	5.4	5.3	5.1	4.8	4.5	4.1	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	230	200	200	200	200	200	200	210	230	280	...
2	...	230	220	220	210	210	200	210	200	200	220	240	...
3	...	230	220	220	210	210	210	210	200	200	220	...	...
4	...	230	220	220	210	210	200	200	200	200	230	...	...
5	...	230	220	200	200	200	200	190	200	210	220	240	...
6	...	230	220	210	210	210	210	200	200	200	230	...	...
7	...	230	220	220	210	210	210	200	200	200	220	...	...
8	...	230	220	210	220	210	200	200	200	200	210	...	...
9	...	230	230	220	210	210	200	200	200	210	200	230	...
10	...	230	220	210	200	200	200	200	200	190	220	240	...
11	...	230	230	220	210	210	200	200	200	200	210	...	...
12	...	230	220	200	210	210	200	200	200	200	220	...	...
13	...	230	220	220	21	210	210	200	200	200	220	...	...
14	...	230	220	220	210	210	200	200	200	200	210	...	...
15	...	220	230	220	220	210	210	200	200	200	210	...	...
16	...	230	230	220	210	220	200	200	210	210	210	...	...
17	...	230	230	210	210	210	205	200	220	200	220	...	...
18	...	230	220	220	210	210	200	205	200	210	215	230	...
19	...	230	220	220	210	210	210	210	210	210	220	...	...
20	...	250	230	220	220	210	210	210	200	200	220	...	...
21	...	230	230	220	210	210	210	210	210	205	220	...	...
22	...	240	230	230	220	230	210	210	210	210	210	...	...
23	...	230	230	220	220	220	210	210	200	200	220	...	...
24	...	240	220	210	210	210	210	210	200	200	200	...	...
25	...	230	230	220	220	210	210	210	210	200	200	...	...
26	...	230	220	230	210	210	200	200	200	200	220	...	...
27	...	240	230	220	220	210	210	200	200	190	210	...	...
28	...	...	230	220	...c	210	210	205	205	200	230	...	...
29	...	...	230	220	210	210	210	21	220	205	190	...	...
30	...	240	220	220	...c	210	...c	205	200	200	240	...	...
31	...	240	230	15	210	210	210	200	200	190	210	...	...
* MEAN	...	232	225	217	211	210	205	203	203	202	216	244	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 62

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1939

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.5	1.2	1.3	...c	2.2	2.2	2.2	2.2	2.2	2.0	1.3	1.1	1.1
2	0.5	1.1	1.2	2.1	2.0	2.1	2.2	2.2	2.1	1.9	1.2	1.1	0.5
3	0.7	1.2	1.2	1.3	2.0	2.1	2.2	2.2	2.1	2.1	1.3	1.2	1.1
4	0.6	1.2	1.2	1.3	2.1	2.2	2.2	2.1	2.0	2.0	1.2	1.2	1.1
5	0.5	0.8	1.2	2.1	2.0	2.1	2.2	2.1	2.2	2.1	1.2	1.2	1.2
6	.6	1.2	1.3	2.0	2.1	2.1	2.2	2.1	2.1	2.1	1.2	1.2	1.2
7	1.1	1.2	1.2	2.0	2.1	2.2	2.1	2.1	2.1	2.0	1.2	1.1	1.0
8	1.0	0.8	1.2	1.3	2.0	2.0	2.0	2.0	2.0	2.0	1.2	1.2	0.7
9	0.6	1.1	1.2	1.2	2.1	2.1	2.1	2.1	2.1	2.0	1.2	0.8	0.8
10	1.1	1.1	1.2	1.2	2.1	2.1	2.1	2.1	2.1	2.1	1.3	1.2	1.2
11	0.7	1.2	1.2	2.0	2.1	2.1	2.1	2.2	2.1	2.0	1.2	0.8	1.1
12	1.2	1.2	1.2	2.0	2.0	2.2	2.2	2.1	1.3	1.2	1.2	1.2	0.6
13	1.2	1.2	1.2	1.3	2.2	2.1	2.0	2.0	2.0	1.2	1.2	1.2	1.1
14	1.1	1.2	1.2	2.0	2.0	2.1	2.0	2.0	2.0	2.0	1.2	1.2	0.8
15	0.6	1.1	1.2	1.2	2.0	2.0	2.0	2.1	2.0	1.2	1.2	0.8	0.7
16	0.5	1.0	1.2	1.2	2.1	2.1	2.0	2.0	2.2	2.0	1.2	1.2	0.7
17	0.5	0.8	1.2	2.0	2.0	2.1	2.2	2.1	2.0	1.3	1.2	0.8	1.1
18	0.5	0.7	1.2	1.2	2.0	2.2	2.2	2.2	2.0	1.3	1.2	1.2	1.1
19	1.2	1.2	1.2	1.2	1.4	2.1	2.2	2.1	2.2	1.3	1.2	1.2	1.2
20	0.5	0.8	1.2	2.0	2.5	2.1	2.1	2.2	2.1	1.4	1.2	1.2	1.1
21	1.0	1.1	1.2	1.2	2.0	2.3	2.4	2.1	2.1	2.0	1.3	1.2	1.1
22	0.5	1.1	1.2	2.1	2.2	p3.6	2.3	2.1	2.1	1.4	1.2	0.8	1.1
23	0.5	1.1	1.2	2.0	2.0	2.1	2.1	2.1	2.1	1.3	1.2	0.8	0.8
24	1.2	1.2	1.2	2.0	2.2	2.1	2.2	2.0	1.3	1.3	0.8	0.8	0.6
25	0.5	0.8	1.2	1.2	2.1	2.2	2.1	2.0	2.0	1.2	1.2	0.8	0.8
26	0.5	0.8	1.2	1.2	2.1	2.0	2.1	2.1	1.3	1.2	0.7	1.1	1.1
27	0.7	1.0	1.2	1.2	2.1	2.1	2.2	2.1	2.0	1.3	1.2	...c	1.1
28	1.2	1.1	2.1	2.1	2.2	2.3	2.2	2.1	2.0	1.2	1.2	1.1	...c
29	0.5	1.1	1.2	2.1	2.1	2.1	2.1	2.2	2.0	1.3	1.2	1.2	1.2
30	1.2	1.2	1.2	2.0	...c	2.2	...c	2.0	2.0	1.2	1.2	0.8	0.7
31	0.5	0.8	1.2	1.2	2.0	2.1	2.0	2.1	1.9	1.2	1.2	0.8	0.8
MEAN*	0.8	1.0	1.2	1.6	2.1	2.1	2.1	2.1	2.0	1.6	1.2	1.0	1.0

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.7	2.7	3.4	...c	4.0	4.1	4.1	4.2	3.9	3.7	3.3	2.7	1.8
2	1.7	2.7	3.3	3.8	3.9	4.1	4.1	4.1	4.0	3.8	3.4	2.7	1.8
3	1.7	2.7	3.3	3.7	4.0	4.2	4.2	4.1	4.0	3.7	3.4	2.7	2.0
4	1.7	2.6	3.3	3.7	3.8	4.0	4.1	4.1	4.0	3.7	3.3	2.7	1.7
5	1.5	2.6	3.4	3.7	3.8	4.0	4.0	4.0	4.0	3.6	3.2	2.6	1.7
6	1.6	2.6	3.2	3.6	3.3	4.0	4.2	4.1	3.8	3.6	3.2	2.6	1.8
7	1.6	2.7	3.3	3.7	3.9	4.0	4.1	4.1	3.9	3.6	3.2	2.6	1.7
8	1.6	2.5	3.1	3.6	3.8	3.9	4.0	3.9	3.7	3.5	3.1	2.8	1.9
9	1.6	2.6	3.1	3.5	3.7	3.9	3.9	3.9	3.8	3.5	3.1	2.7	1.7
10	1.6	2.6	3.1	3.5	3.7	3.9	3.9	3.9	3.8	3.6	3.1	2.6	1.6
11	1.5	2.5	3.1	3.5	3.6	3.9	3.9	3.8	3.7	3.5	3.0	2.5	1.7
12	1.6	2.5	3.1	3.4	3.7	3.8	3.9	3.8	3.7	3.5	3.1	2.5	1.6
13	1.6	2.5	3.0	3.5	3.7	3.8	4.0	3.9	3.7	3.5	3.2	2.5	1.5
14	1.5	2.5	3.1	3.5	3.7	3.8	3.9	3.8	3.7	3.5	3.0	2.6	1.6
15	1.6	2.6	3.1	3.5	3.8	3.8	3.9	3.8	3.6	3.4	3.0	2.5	1.5
16	1.6	2.5	3.1	3.5	3.7	3.8	3.8	3.8	3.7	3.5	3.0	2.6	1.6
17	1.5	2.6	3.0	3.5	3.7	3.8	3.9	3.8	3.8	3.5	3.0	2.5	1.4
18	1.6	2.5	3.1	3.5	3.7	3.9	3.9	3.8	3.7	3.5	3.0	2.2	1.6
19	1.6	2.6	3.2	3.5	3.8	3.9	4.0	4.0	3.8	3.5	3.1	2.6	1.6
20	1.6	2.6	3.1	3.6	3.8	3.9	4.0	3.9	3.7	3.5	3.1	2.6	1.5
21	1.6	2.6	3.2	3.5	3.8	4.0	4.1	3.8	3.7	3.5	3.1	2.7	1.5
22	1.6	2.6	3.2	3.4	3.7	4.3	4.0	3.9	3.8	3.5	3.0	2.6	1.4
23	1.6	2.6	3.2	3.7	3.8	4.0	4.0	3.9	3.8	3.5	3.1	2.5	1.6
24	1.6	2.6	3.2	3.5	3.8	3.9	3.9	3.8	3.6	3.5	3.0	2.6	1.4
25	1.6	2.6	3.2	3.5	3.7	3.9	4.0	3.8	3.7	3.5	2.9	2.5	1.4
26	1.6	2.6	3.1	3.5	3.8	3.9	3.9	3.8	3.6	3.5	3.0	2.5	1.4
27	1.6	2.6	3.2	3.5	3.8	3.8	3.9	3.8	3.7	3.5	3.1	...c	1.4
28	1.5	2.6	3.2	3.6	...c	4.0	4.0	3.8	3.6	3.4	3.0	2.4	1.4
29	1.6	2.6	3.1	3.5	3.8	3.8	3.9	3.8	3.6	3.4	2.9	2.4	1.4
30	0.8	2.6	2.5	3.5	...c	3.8	...c	3.8	3.6	3.4	2.9	2.5	1.3
31	1.5	2.6	3.2	3.5	3.7	3.8	3.8	3.8	3.6	3.3	2.9	2.4	0.8
MEAN*	1.6	2.6	3.2	3.6	3.6	3.9	4.0	3.9	3.8	3.5	3.1	2.6	1.6

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

APRIL 1939 APRIL 1939

TABLE 63

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.8	6.6	5.2	5.5	5.3	4.9	6.1	[illegible]	11.2	12.5	12.5	11.3	10.9	11.5	[illegible]	11.7	11.7	11.7	10.9	9.4	7.6	8.0	8.4	9.5	9.2
2	11.1	9.2	7.7	6.8	6.5	5.5	6.1	9.6	11.4	12.4	12.4	11.9	12.2	12.6	12.8	13.3	12.9	13.0	12.0	p9.9	p12.6	8.5	9.3	9.5	10.4
3	9.3	9.0	7.3	4.3	3.6	2.2	4.0	8.5	9.6	...c	...c	10.0	11.1	11.7	12.2	12.5	13.0	13.5	12.7	11.5	10.8	10.5	p12.0	p12.4	...
4	9.7	9.6	8.6	5.7	5.1	4.0	6.0	9.2	10.5	10.2	9.9	9.8	10.2	11.0	11.4	11.3	12.0	13.0	12.6	12.2	12.0	11.8	p12.8	9.9	10.0
5	9.5	[illegible]	7.6	5.4	4.5	3.9	5.2	8.5	10.7	10.2	10.1	10.0	10.2	10.7	11.2	11.6	11.9	12.2	12.2	11.2	9.8	p13.0	p12.4	9.1	9.6
6	9.9	9.8	[illegible]	7.1	6.7	5.7	6.2	9.3	11.3	11.8	11.2	11.0	10.3	11.4	12.1	12.5	13.0	13.1	12.8	11.8	11.6	11.5	10.9	10.4	10.4
7	p12.2	9.2	7.2	5.0	3.9	2.6	5.0	8.8	11.0	11.7	10.8	9.3	9.7	10.4	10.9	11.7	11.9	11.9	11.2	9.0	8.5	9.5	9.6	8.9	9.2
8	10.6	10.3	8.8	5.4	3.9	3.7	5.3	9.1	11.1	12.2	12.4	11.9	11.9	12.2	12.3	13.6	13.3	13.2	12.5	11.2	p13.7	p13.0	p12.0	9.6	10.6
9	10.3	9.4	p8.7	5.6	5.1	5.1	6.0	9.4	11.5	12.5	12.6	11.6	11.4	11.0	11.4	11.9	12.1	11.5	11.3	9.9	p13.8	p13.0	10.6	10.4	10.3
10	8.5	8.3	[illegible]	6.7	5.0	3.9	5.6	8.8	[illegible]	[illegible]	10.2	10.5	10.9	11.0	11.0	11.5	10.6	10.7	10.3	[illegible]	p12.8	...c	11.5	8.6	...
11	7.9	6.6	[illegible]	5.0	4.0	4.1	5.5	9.6	11.5	13.1	12.8	11.8	11.6	11.6	11.8	12.2	12.9	12.6	11.7	10.5	10.5	11.8	11.0	10.1	9.9
12	9.4	8.7	7.8	6.6	6.0	5.9	7.2	9.9	11.7	[illegible]	...c	...c	12.0	12.8	12.8	12.6	12.7	12.5	11.3	8.9	p12.4	p12.0	p12.0	9.1	...
13	8.6	7.9	6.4	...c	...c	...c	...c	8.6	10.2	11.0	10.8	10.4	10.6	10.9	11.0	11.1	11.0	10.5	9.4	7.9	p12.0	p12.0	p12.2	p11.9	...
14	p11.9	p7.9	[illegible]	5.5	5.1	4.3	8.3	[illegible]	10.9	11.8	11.6	11.0	11.5	12.0	12.2	12.3	12.6	12.2	11.9	10.4	9.2	9.0	9.4	9.7	9.9
15	9.5	8.6	7.3	6.1	4.8	4.2	5.3	8.8	10.8	11.7	11.7	11.3	11.4	12.2	12.6	13.0	13.0	12.4	11.3	9.9	8.5	8.5	8.4	8.3	9.6
16	p10.4	7.9	6.9	5.8	p7.2	p5.6	5.7	9.0	11.1	11.6	10.3	10.2	10.5	11.0	11.2	11.6	11.9	11.7	10.7	8.4	7.9	8.1	8.4	p10.0	9.3
17	8.0	12.2	10.1	10.5	p8.4	p5.5	5.4	9.0	10.9	11.6	12.1	12.2	13.0	13.6	13.1	12.9	12.0	11.4	12.9	12.7	11.6	12.0	12.0	12.7	11.1
18	13.6	13.1	11.5	9.2	7.0	p12.0	p12.7	9.9	11.4	12.0	12.4	12.2	11.6	11.7	11.5	11.5	12.3	12.0	12.1	11.0	11.2	11.3	11.8	10.8	11.5
19	9.2	6.3	6.5	6.0	5.7	5.2	6.2	9.7	12.0	12.7	12.5	12.2	12.0	10.9	10.7	11.5	11.9	12.1	11.8	10.4	10.3	10.1	10.0	9.3	9.9
20	9.4	8.0	7.6	7.2	6.0	5.2	7.0	10.9	12.0	13.6	14.0	12.0	10.7	11.4	11.8	12.1	12.8	13.1	12.7	12.2	11.6	11.0	11.4	11.3	10.6
21	11.9	10.6	8.1	7.7	7.6	6.4	6.7	10.5	12.8	13.5	13.1	11.5	...b	11.1	11.5	11.3	11.4	11.2	11.0	10.8	11.4	11.3	10.8	11.8	...
22	11.0	8.1	6.7	6.3	5.4	5.0	5.6	9.2	11.7	12.5	11.9	10.0	10.5	10.7	10.6	10.7	11.0	11.2	10.8	9.1	8.6	9.0	9.2	9.1	9.3
23	8.3	6.5	4.6	4.4	p8.7	p8.2	5.4	10.0	11.2	11.6	12.9	13.0	13.4	13.4	13.4	12.6	12.0	11.9	11.3	[illegible]	10.2	9.9	10.3	11.3	10.2
24	11.6	11.1	9.3	5.9	4.6	3.0	5.5	9.5	11.6	12.4	12.2	...c	11.8	11.4	10.0	8.4	8.4	9.7	10.1	9.4	9.8	8.9	7.2	7.5	...
25	6.4	5.5	5.1	5.3	5.2	5.4	6.9	9.9	11.9	13.8	14.2	14.2	14.0	12.7	12.8	12.1	12.5	11.6	11.7	10.2	10.5	11.3	p12.7	9.6	10.3
26	8.8	9.9	9.3	6.0	3.9	2.8	5.5	9.3	11.2	12.0	11.9	11.0	11.0	11.0	11.4	11.9	11.5	11.0	9.4	8.7	8.6	9.3	9.6	8.3	9.3
27	8.3	6.6	p11.0	p8.4	4.4	3.6	5.5	9.2	11.1	11.5	11.2	10.5	10.6	10.8	11.3	11.1	10.8	10.1	8.4	7.0	8.4	9.7	8.8	8.5	9.0
28	7.5	7.6	7.8	7.1	6.9	6.7	7.6	10.5	12.1	12.5	12.1	11.0	11.7	11.4	11.5	11.7	11.7	11.4	10.7	10.0	10.8	10.8	9.9	9.8	10.1
29	9.6	9.9	9.6	6.7	5.8	5.0	6.0	9.9	11.7	12.0	11.3	10.8	11.2	12.0	12.6	12.7	12.7	12.1	11.1	10.0	9.7	9.7	9.6	9.7	10.1
30	8.8	7.0	8.5	6.8	6.0	5.4	6.1	9.0	10.7	11.4	...c	...c	...c	...c	...c	...c	12.2	11.3	10.7	9.5	9.1	9.2	8.7	9.3	...
31																									
MEAN*	9.7	8.8	7.9	6.3	5.6	5.0	6.2	9.4	11.2	12.0	11.9	11.3	11.4	11.6	11.8	11.9	12.0	11.9	11.3	10.2	10.5	10.5	10.4	9.9	9.9

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 64

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1939

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	205	210	240	250	250	270	260	260	260	260	270	270	280	280	280	270	260	250	280	350	340	270	250	220	264
2	210	220	240	240	230	220	250	250	260	280	280	280	300	290	270	260	260	250	280	360	260	230	220	220	257
3	220	220	220	210	240	290	270	260	270	...c	...c	280	300	280	280	270	270	240	280	370	310	260	230	220	...
4	220	220	220	240	240	250	270	270	280	290	300	300	300	300	300	280	270	250	270	310	310	280	230	240	268
5	250	220	220	230	230	220	260	270	270	270	290	300	310	300	280	260	260	250	270	330	350	350	240	250	270
6	220	210	230	240	230	230	250	250	260	260	290	290	300	300	290	260	270	250	280	350	310	260	270	210	263
7	210	210	210	230	230	230	260	250	260	270	300	300	290	300	280	260	260	250	290	430	370	220	220	220	265
8	210	200	200	220	240	250	260	260	260	280	290	300	300	300	290	...c	...c	250	290	380	400	270	270	240	...
9	210	220	230	260	250	240	260	250	260	270	280	280	300	290	270	270	260	250	300	340	310	300	230	200	264
10	230	200	210	200	190	290	280	260	260	280	300	290	300	310	300	270	260	260	310	350	410	...c	220	210	...
11	220	240	250	260	270	260	280	290	260	270	290	300	280	280	270	260	260	260	300	330	280	230	310	210	269
12	230	230	230	230	250	260	270	250	260	270	...c	...c	290	300	270	...c	270	...c	290	350	300	260	240	200	...
13	210	220	220	...c	...c	...c	...c	...	260	270	270	280	290	290	280	270	270	260	300	390	440	270	240	220	...
14	210	210	220	230	230	230	270	260	260	270	280	290	290	300	290	260	260	260	300	390	350	260	230	210	265
15	210	220	220	230'	230	230	220	260	260	270	280	290	300	290	290	280	270	270	260	300	330	320	270	240	264
16	220	220	240	240	240	220	260	260	270	290	300	300	300	300	280	260	270	270	310	390	390	250	200	210	270
17	250	230	310	250	570	660	300	250	260	270	270	280	290	280	280	290	270	250	250	270	260	240	230	230	293
18	230	240	240	220	260	320	280	250	260	270	290	300	290	300	280	280	280	...	300	290	250	230	220	220	...
19	220	220	240	230	270	260	290	260	260	270	280	280	290	290	280	280	260	270	300	350	320	230	230	230	267
20	220	220	240	240	240	230	260	250	260	260	280	[illegible]	300	290	280	260	270	260	290	310	280	250	240	230	260
21	210	220	240	240	230	240	250	250	270	280	280	290	...b	...b	260	270	260	260	310	340	280	230	230	230	...
22	220	230	250	230	230	220	250	250	260	280	300	300	300	300	280	270	270	260	310	380	310	240	220	220	266
23	210	200	220	280	330	440	270	240	260	270	280	...b	...b	300	...b	280	270	260	300	330	290	270	230	230	...
24	[illegible]	210	210	220	230	240	250	260	260	260	280	...c	300	300	290	270	260	250	310	360	250	230	230	220	...
25	240	270	280	240	250	240	250	250	260	260	270	270	280	270	280	250	260	270	310	320	300	240	230	240	264
26	240	230	220	240	240	250	270	260	270	270	270	280	280	280	280	280	280	[illegible]	230	420	300	260	230	220	266
27	220	240	220	220	230	240	280	270	270	280	280	300	300	290	280	280	290	270	300	370	270	230	240	240	267
28	220	230	240	250	240	240	270	260	270	270	270	270	280	280	280	270	280	260	310	330	260	240	220	230	261
29	210	210	220	220	220	220	270	260	270	270	270	280	290	280	280	260	270	260	330	350	330	270	240	230	263
30	220	230	210	210	230	220	280	250	260	280	...c	...c	...c	...c	...c	...c	270	290	330	380	360	270	230	230	...
31																									
MEAN*	220	221	231	234	253	266	265	257	263	272	283	288	294	292	281	269	268	259	293	351	318	258	236	224	266

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 65

APRIL 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1939

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.3	4.7	5.0	5.3	5.2	5.3	5.2	5.2	4.9	4.5	...	...
2	...	4.5	5.1	5.2	5.4	5.3	5.5	5.3	5.1	4.9	4.6	...	...
3	...	4.5	4.6	...c	...c	5.2	5.0	5.2	5.0	4.8	4.7	...	...
4	...	5.0	5.3	5.4	5.4	5.4	5.4	5.4	5.2	4.9	4.5	...	...
5	...	5.2	5.1	5.2	5.5	5.5	5.5	5.4	5.1	4.8	4.6	...	...
6	...	4.8	4.8	5.0	5.3	5.5	5.5	5.3	5.3	5.0	4.7	...	...
7	...	4.8	5.2	5.0	5.4	5.4	5.3	5.3	5.0	4.8	4.3	...	...
8	...	4.8	4.9	...c	...c	...c	...c	...c	...c	...c	...c	...	...
9	...	4.3	4.9	5.1	5.3	5.4	5.2	5.0	4.7	4.3	4.3	...	...
10	...	4.0	4.8	5.2	5.4	5.4	5.4	5.4	5.3	5.0	4.4	...	...
11	...	...	4.8	5.0	5.4	5.4	5.3	5.0	4.7	4.3	4.3	...	...
12	...	...	4.5	5.0	...c	...c	5.4	5.4	5.2	...c	4.6	...	...
13	...	...	4.7	5.1	5.2	5.3	5.4	5.3	5.2	4.8	4.4	...	...
14	...	4.5	4.7	5.0	5.3	5.2	5.3	5.4	5.3	4.6	4.2	...	...
15	...	4.4	5.1	5.0	5.4	5.5	5.5	5.4	5.2	4.7	4.5	...	...
16	...	4.7	5.1	5.4	5.4	5.4	5.5	5.4	5.2	4.6	4.3	...	...
17	...	...	4.8	5.1	5.3	5.4	5.5	5.3	5.2	4.9	4.4	...	...
18	...	...	5.0	5.1	5.4	5.4	5.4	5.4	5.1	5.0	4.8	...	...
19	...	4.3	5.0	5.2	5.3	5.4	5.5	5.4	5.3	4.9	4.4	...	...
20	...	4.5	5.2	5.0	5.4	5.5	5.6	5.5	5.4	4.8	4.5	...	...
21	...	4.4	5.0	5.2	5.4	5.5	...b	...b	5.2	4.6	4.2	...	...
22	...	...	4.8	5.2	5.5	5.5	5.5	5.4	5.2	4.7	4.2	...	...
23	...	...	5.0	5.2	5.3	5.2	...b	...b	5.5	...b	5.0	...	...
24	...	5.0	5.2	5.0	5.4	...c	5.5	5.5	5.2	5.1	4.1	...	...
25	...	...	5.3	5.1	5.3	5.5	5.5	5.3	5.3	4.6	4.3	...	...
26	...	4.8	5.0	5.2	5.4	5.5	5.5	5.4	5.2	5.0	4.7	...	...
27	...	4.9	5.1	5.3	5.4	5.6	5.7	5.5	5.1	5.2	4.8	...	...
28	...	4.6	5.2	5.0	5.3	5.4	5.5	5.4	5.2	5.1	4.7	...	...
29	...	4.6	5.2	5.4	5.4	5.6	5.8	5.6	5.2	4.7	4.3	...	...
30	...	...	4.6	5.4	...c	...c	...c	...c	...c	...c	4.4	...	...
31													
MEAN*	...	4.6	5.0	5.1	5.4	5.4	5.5	5.4	5.2	4.8	4.5	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	240	230	220	210	200	210	190	200	200	210	...	...
2	...	230	220	210	210	200	200	200	200	200	210	...	...
3	...	240	220	...c	...c	200	200	200	200	200	220	...	...
4	...	240	220	210	210	205	200	200	200	200	230	...	...
5	...	240	220	210	205	200	205	200	210	200	220	...	...
6	...	230	220	210	210	205	210	200	200	200	220	...	...
7	...	230	230	210	200	200	200	200	200	200	240	...	...
8	...	240	230	...c	...c	...c	...c	...c	...c	...c	...c	...	...
9	...	230	230	210	210	200	200	200	200	200	220	...	...
10	...	240	230	220	210	205	200	200	200	200	210	...	...
11	...	...	220	210	200	200	200	190	200	200	220	...	...
12	...	...	220	220	...c	200	210	200	...c	220	250	...	...
13	...	...	230	210	200	200	200	200	200	210	230	...	...
14	...	260	230	220	220	210	200	200	210	210	230	...	...
15	...	230	230	220	210	210	200	200	200	210	220	...	...
16	...	240	230	210	210	205	200	210	200	200	210	...	...
17	...	...	240	220	220	210	210	220	210	220	230	...	...
18	...	...	230	220	210	210	200	210	200	220	250	...	...
19	...	240	220	230	220	220	220	...b	220	210	240	...	...
20	...	230	230	220	215	210	205	200	200	200	240	...	...
21	...	240	220	230	220	210	...b	...b	...b	220	240	...	...
22	...	...	230	220	210	210	210	210	205	210	240	...	...
23	...	...	230	230	220	...b	...b	240	...b	220	250	...	...
24	...	240	230	220	220	...c	200	210	200	200	210	...	...
25	...	...	230	230	220	220	210	205	210	210	250	...	...
26	...	240	240	220	220	200	...b	...b	250	200	230	...	...
27	...	250	230	240	...c	...c	...c	...c	...c	200	240	...	...
28	...	240	230	230	...c	210	210	...c	200	210	240	...	...
29	...	240	240	230	220	210	220	p270b	220	220	240	...	...
30	...	...	230	230	...c	...c	...c	...c	...c	...c	240	...	...
31													
MEAN*	...	239	228	220	212	206	205	204	206	207	230	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 66

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1939 APRIL 1939

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.7	1.2	1.2	1.3	2.2	2.1	2.1	2.1	1.3	1.2	1.2	0.8	0.6	1.5	2.4	3.0	3.5	3.7	3.8	3.8	3.8	3.6	3.4	2.9	2.5	1.2
2	0.5	1.1	1.2	1.3	2.0	2.1	2.1	2.1	2.1	2.0	1.3	1.2	1.2	1.6	2.6	3.2	3.5	3.7	3.9	4.0	3.8	3.7	3.5	3.1	2.4	1.3
3	0.5	0.8	1.2	...c	...c	2.1	2.0	2.1	1.8	1.2	1.2	0.8	0.7	1.4	2.5	3.1	...c	...c	3.8	3.9	3.8	3.6	3.3	3.0	2.3	1.2
4	0.5	0.8	1.2	1.3	2.1	2.1	2.2	2.1	1.4	1.2	1.2	0.8	0.6	1.6	2.5	3.2	3.5	3.5	3.9	3.8	3.9	3.6	3.3	3.0	2.4	0.8
5	0.6	1.2	1.2	2.0	2.0	2.1	2.0	2.1	1.9	1.2	0.8	0.7	0.6	1.6	2.6	3.2	3.5	3.7	3.8	3.8	3.8	3.6	3.4	3.0	2.4	1.2
6	0.6	1.0	1.2	1.2	2.0	2.1	2.1	2.0	2.0	2.0	1.2	0.8	0.6	1.6	2.5	3.1	3.5	3.5	3.9	3.9	3.8	3.6	3.3	2.9	2.4	1.3
7	0.5	1.1	1.2	2.0	2.0	2.1	2.1	2.1	2.0	1.8	1.2	1.2	0.6	1.5	2.6	3.2	3.5	3.7	3.8	3.8	3.8	3.6	3.4	3.1	2.4	1.4
8	0.5	1.0	1.1	1.2	2.0	2.0	2.0	2.1	2.2	1.3	1.2	1.2	1.1	1.6	2.6	3.2	...c	...c	...c	...c	...c	...c	...c	3.0	2.5	1.4
9	0.5	1.2	1.2	1.3	2.0	2.1	2.0	2.7	2.0	1.3	1.2	0.8	0.6	1.6	2.6	3.1	3.5	3.7	3.8	3.9	3.8	3.6	3.5	2.9	2.3	1.2
10	0.5	1.1	1.1	1.3	2.1	2.1	2.1	2.0	1.2	1.2	1.2	0.8	0.6	1.6	2.5	3.1	3.5	3.7	3.9	3.9	3.8	3.5	3.4	3.0	2.4	1.4
11	1.0	0.8	0.3	1.4	2.0	2.1	2.0	2.0	1.4	1.2	1.2	1.2	0.7	1.6	2.6	3.1	3.5	3.7	3.8	3.8	3.7	3.6	3.4	2.9	2.5	1.3
12	0.5	1.0	1.2	2.0	...c	...c	2.2	2.3	2.1	...c	1.2	0.7	1.0	1.5	2.6	3.1	3.6	...c	...c	4.0	3.9	3.6	...c	2.8	2.4	1.2
13	...c	...c	1.2	1.3	2.2	2.1	2.2	2.2	2.1	1.2	1.2	0.8	0.6	...c	...c	3.2	3.5	3.8	3.9	4.0	3.8	3.6	3.5	3.1	2.3	1.5
14	0.5	0.7	1.2	2.3	2.4	2.4	2.3	2.2	2.4	2.2	1.3	1.2	0.7	1.5	2.6	3.3	3.7	4.0	4.0	4.0	3.9	3.8	3.6	3.1	2.4	1.4
15	1.1	1.2	1.2	2.1	2.1	2.3	2.2	2.2	2.2	1.4	1.2	0.8	0.8	1.6	2.6	2.3	3.6	3.8	4.0	4.0	3.9	3.7	3.4	3.0	2.5	1.2
16	0.7	1.2	1.3	2.2	2.3	2.3	2.3	2.3	p3.6	2.1	1.2	0.8	0.6	1.7	2.6	3.4	3.7	3.8	4.0	4.0	3.9	3.8	3.5	3.1	2.4	1.2
17	0.6	1.2	2.2	2.2	2.3	2.3	2.3	2.2	2.2	1.3	1.2	1.2	0.7	1.7	2.6	3.2	3.6	3.8	3.9	4.1	3.7	3.7	3.5	3.0	2.3	1.4
18	0.5	1.2	1.3	2.2	2.3	2.3	2.3	2.3	2.2	1.4	1.4	0.7	0.6	1.6	2.5	3.4	3.6	3.8	4.0	4.0	3.7	3.7	3.5	3.1	2.4	1.2
19	0.5	0.8	1.2	2.	3.6	2.4	2.3	p4.7	3.4	2.2	1.3	0.8	0.8	1.6	2.6	3.2	3.7	4.0	4.0	4.1	...b	3.8	3.6	3.1	2.4	1.3
20	0.7	0.8	2.1	2.1	2.3	2.3	2.4	2.3	2.2	1.4	1.2	0.8	1.0	1.6	2.6	3.2	3.6	3.8	3.9	4.0	4.0	3.8	3.5	3.1	2.4	1.2
21	1.2	0.8	1.3	2.2	2.3	2.3	...b	p6.6b	p3.8b	2.4	2.2	1.2	0.8	1.6	2.6	3.3	3.7	3.9	4.0	...b	...b	...b	3.7	3.2	2.5	1.3
22	1.1	1.1	1.3	1.4	2.3	2.5	2.4	2.3	2.3	1.3	1.2	0.6	0.6	1.6	2.6	3.5	3.6	3.8	4.0	3.9	3.9	3.8	3.4	2.9	2.4	1.2
23	1.6	1.2	2.2	2.2	2.2	p6.3b	p5.2b	3.8	p6.0b	2.5	1.4	1.2	0.6	1.6	2.5	3.1	3.6	3.8	...b	...b	4.3	...b	3.8	3.1	2.3	1.2
24	1.0	...c	1.2	2.1	2.1	...c	2.3	2.2	2.2	1.3	1.2	1.2	1.0	1.6	2.6	3.5	3.6	3.9	...c	4.0	3.9	3.7	3.5	3.0	2.4	1.2
25	0.5	0.6	1.1	1.6	2.0	2.4	2.3	2.3	2.2	2.2	2.2	1.2	1.2	1.8	2.6	3.1	3.7	4.0	4.0	4.0	3.9	3.7	3.6	3.1	2.4	1.4
26	0.6	0.8	1.3	2.4	2.5	2.3	...b	...b	p3.7b	2.7	2.5	1.2	1.0	1.7	2.6	3.4	3.7	4.0	4.0	...b	...b	p4.3b	3.7	3.1	2.5	1.3
27	1.1	1.2	1.8	2.0	2.0	2.5	p3.4	p3.4	2.0	1.9	1.5	0.8	0.8	1.8	2.7	3.4	3.7	...c	...c	...c	...c	...c	3.5	3.2	2.4	1.2
28	0.5	0.8	p2.7	2.6	...c	2.3	2.3	2.5	2.2	2.0	1.2	0.8	0.6	1.6	2.6	3.4	3.7	...c	4.1	4.1	...c	3.8	3.5	3.0	2.3	1.2
29	0.5	1.1	2.1	2.2	2.2	2.3	3.6	...b	2.5	2.1	1.2	0.8	0.9	1.7	2.8	3.5	3.8	4.0	4.1	4.3	p5.0b	4.0	3.6	3.0	2.3	1.2
30	0.5	1.2	1.2	2.0	...c	...c	...c	...c	...c	...c	1.2	1.2	1.1	1.7	2.7	3.4	3.7	...c	...c	...c	...c	...c	...c	3.1	2.1	1.2
31																										
MEAN*	0.7	1.0	1.3	1.9	2.2	2.2	2.2	2.3	2.1	1.7	1.3	0.9	0.8	1.6	2.6	3.2	3.6	3.8	3.9	4.0	3.9	3.7	3.5	3.0	2.4	1.3

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 67

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1939 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MAY 1939

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	9.2	8.2	7.9	6.1	5.1	5.0	6.1	9.0	10.2	11.2	11.8	12.6	12.6	12.7	12.1	12.3	12.1	12.0	11.2	10.5	9.3	8.5	8.8	8.6	9.7
2	8.7	8.7	7.7	7.1	p12.8	p12.8	p10.5	9.6	12.0	14.6	15.5	14.4	14.4	14.2	13.3	12.8	12.2	11.9	10.9	10.1	10.3	9.7	9.5	10.3	11.4
3	10.7	9.8	9.1	8.8	8.8	8.7	9.1	11.3	12.6	12.7	12.2	12.0	12.4	12.4	12.6	12.6	12.8	12.5	11.7	10.2	p13.0	9.2	p8.8	8.0	10.9
4	8.4	8.4	7.6	6.6	5.1	4.3	6.1	9.6	11.6	12.2	12.0	10.6	10.0	9.8	10.6	11.3	11.5	11.4	11.2	10.5	10.1	10.3	10.1	9.0	9.5
5	8.4	7.4	7.9	7.1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.1	10.1	10.0	10.1	10.8	11.3	10.8	10.6	9.8	...
6	8.5	6.6	6.2	5.3	4.9	4.8	5.7	9.2	11.1	12.6	12.6	12.8	11.9	10.8	11.4	10.8	9.9	10.1	10.8	10.6	10.4	11.1	9.3	10.2	9.5
7	10.0	9.2	8.6	8.0	p12.6	p13.0	9.5	p12.6	12.0	12.5	12.4	11.8	11.3	11.6	11.0	10.8	10.5	10.5	9.9	8.7	8.5	9.0	7.9	8.4	10.4
8	8.1	6.7	6.2	5.7	5.9	p11.9	p9.5	9.3	11.4	12.4	12.4	11.6	11.0	10.6	10.5	9.9	9.9	10.1	9.9	9.7	9.5	8.8	8.7	8.5	9.5
9	7.9	7.8	7.3	6.1	6.1	6.4	6.5	9.5	11.7	12.4	12.3	12.4	11.8	10.9	10.5	10.6	10.4	9.8	9.0	7.3	6.6	7.2	8.1	7.5	9.0
10	6.8	6.6	5.6	5.1	4.9	4.5	5.6	9.0	11.2	12.0	11.6	10.6	9.9	9.9	10.3	10.2	10.0	9.2	8.4	7.0	7.1	7.8	8.8	8.9	8.4
11	9.0	7.2	6.3	5.1	4.1	3.0	5.0	8.6	10.0	11.1	11.8	12.0	11.6	11.1	11.1	11.0	11.0	10.5	9.7	8.9	8.4	7.9	7.7	7.7	8.7
12	7.4	7.4	5.7	5.4	4.7	4.1	4.9	8.1	10.0	10.3	10.0	10.6	10.9	10.9	10.9	11.3	10.9	10.1	9.7	8.3	7.7	7.2	6.9	7.2	8.4
13	7.3	7.1	6.7	5.5	5.4	5.5	6.3	8.0	10.2	11.2	10.9	11.1	10.3	10.3	10.5	10.5	10.6	10.6	11.1	9.6	9.7	10.4	9.4	9.0	9.0
14	7.7	7.3	6.9	6.3	6.0	5.4	5.8	8.7	10.4	10.8	10.8	10.9	10.7	10.7	10.9	10.5	10.2	9.3	8.7	8.0	7.7	7.3	7.0	7.0	8.5
15	8.2	8.5	9.2	9.2	9.3	8.6	8.6	9.0	9.2	9.5	9.9	10.5	10.5	10.5	9.8	10.1	10.1	10.3	9.8	9.1	9.8	9.2	7.9	8.0	9.4
16	8.0	8.0	8.3	7.7	7.5	8.9	9.5	10.9	12.3	12.7	12.2	11.5	12.0	12.1	12.0	12.2	11.7	11.3	10.4	9.5	9.3	8.1	7.7	p8.4	10.1
17	8.3	8.3	7.6	6.7	6.4	6.1	5.8	8.0	9.5	9.0	8.9	9.0	9.3	9.9	10.8	11.2	10.9	11.1	10.5	9.7	10.4	10.2	10.0	9.4	9.0
18	8.7	7.7	6.5	4.5	3.6	3.1	4.6	7.7	8.8	9.5	9.9	10.0	10.5	10.3	10.0	9.5	9.5	9.3	8.7	7.8	8.1	8.3	7.7	7.5	8.0
19	7.3	6.4	6.5	5.6	5.5	5.3	5.9	7.7	9.8	10.4	10.3	10.0	9.7	10.0	9.7	10.3	11.5	11.5	10.4	9.2	p12.4	p12.0	p11.7	p11.5	9.2
20	9.4	8.8	7.3	5.1	4.0	3.7	5.2	8.5	10.3	10.7	10.0	9.5	9.4	9.7	10.1	10.0	10.0	9.5	9.5	9.1	8.7	8.3	8.4	8.8	8.5
21	7.8	7.7	6.5	6.1	5.7	4.8	5.2	8.5	10.7	10.9	11.1	10.5	10.7	10.8	10.1	9.7	9.6	9.4	8.5	8.2	8.1	7.2	7.5	7.5	8.4
22	6.3	7.1	6.4	5.8	5.3	4.1	5.6	9.5	9.7	10.3	10.3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.2	7.5	7.2	...
23	7.3	8.3	7.7	6.1	5.4	5.5	6.6	9.0	10.4	11.0	10.4	9.5	9.4	9.4	9.7	10.2	10.3	9.7	8.6	7.1	7.2	8.2	8.6	8.2	8.5
24	6.6	7.3	6.7	5.8	5.7	5.9	6.8	9.0	11.0	11.8	11.0	10.4	10.2	9.6	9.5	10.2	10.2	10.2	10.1	10.1	9.9	9.7	8.7	8.7	9.0
25	9.5	8.8	7.9	6.8	6.2	p8.5	p9.3	7.4	9.6	9.8	9.4	9.2	9.2	10.1	9.9	9.3	8.7	8.2	7.9	7.5	8.1	8.0	6.9	6.2	8.4
26	6.0	5.9	5.8	5.4	5.1	5.0	5.8	8.3	10.4	11.9	11.8	11.8	11.6	12.2	12.5	12.9	12.2	11.5	10.2	9.2	9.5	9.7	8.5	8.5	9.2
27	7.2	7.2	6.8	6.0	5.7	5.5	6.3	8.4	10.0	10.4	10.0	9.8	9.7	9.6	9.6	9.1	9.0	8.7	7.3	6.2	6.7	7.3	6.9	7.1	7.9
28	7.3	7.3	6.0	4.3	4.5	p4.6	4.3	8.3	10.3	10.6	10.9	11.1	10.7	10.7	10.5	10.2	9.8	9.7	9.4	8.8	8.7	8.2	7.6	8.5	8.4
29	8.3	8.0	7.2	7.7	7.3	7.1	3.9	7.3	9.1	10.3	11.2	11.4	11.1	10.3	10.4	10.5	10.1	10.3	10.2	9.7	9.5	9.7	8.8	8.5	9.1
30	8.5	7.6	6.6	4.4	3.3	3.1	4.8	8.0	9.9	10.3	10.2	10.3	10.2	10.4	10.5	10.0	10.3	10.2	9.5	8.9	8.5	8.5	8.6	9.0	8.4
31	8.6	8.2	7.6	7.0	5.8	4.8	5.3	8.9	10.3	10.8	10.7	10.1	10.0	9.6	9.5	10.3	10.2	10.0	10.0	9.8	10.3	10.3	9.2	8.4	9.0
* MEAN	8.1	7.7	7.1	6.2	6.1	6.1	6.5	8.9	10.5	11.2	11.2	11.0	10.8	10.7	10.7	10.7	10.5	10.3	9.8	9.0	9.2	8.9	8.5	8.4	9.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 68

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1939 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — MAY 1939

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	220	220	230	240	240	290	250	260	270	260	280	280	280	280	270	270	280	290	380	320	320	250	240	268
2	240	250	250	290	390	370	310	260	260	260	260	260	260	260	280	260	270	260	320	300	270	250	220	210	273
3	220	250	260	280	290	250	250	260	260	270	260	260	270	270	270	270	260	270	330	380	410	230	240	250	273
4	240	220	220	230	230	230	280	250	260	270	270	280	300	300	280	300	270	260	320	360	340	250	230	220	267
5	210	230	230	250	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	260	270	270	290	310	260	230	220	220	...
6	220	220	240	250	250	220	250	250	270	260	260	280	280	290	300	280	280	260	310	320	280	240	240	230	262
7	240	280	250	330	350	310	290	260	260	260	280	290	290	290	260	270	260	270	320	370	290	330	230	230	284
8	230	230	210	250	300	370	290	250	260	270	270	280	260	280	290	280	280	260	300	290	250	220	220	230	265
9	230	230	250	240	230	220	240	260	260	270	270	290	300	300	290	300	290	270	340	390	380	270	210	220	273
10	220	220	210	230	240	230	260	260	270	270	290	300	320	320	300	300	290	270	330	370	320	250	200	210	270
11	220	210	220	230	230	230	260	240	260	260	300	300	320	310	280	280	290	260	310	350	330	280	220	210	267
12	220	230	240	250	240	240	270	250	260	270	290	290	310	310	290	270	270	260	340	350	340	300	240	230	273
13	220	220	220	230	260	310	300	250	280	260	280	310	310	300	290	290	280	260	270	350	300	240	220	220	270
14	210	220	220	240	250	240	260	260	270	270	300	310	300	300	300	290	290	260	330	370	330	250	210	220	271
15	230	230	250	240	250	240	290	250	270	290	300	310	340	300	310	310	290	260	310	350	300	250	240	240	277
16	230	240	280	270	280	260	290	260	260	270	280	300	300	310	290	290	280	270	330	370	400	260	260	220	283
17	230	230	230	260	260	230	280	260	280	280	300	330	310	310	300	290	280	260	330	330	280	230	220	230	272
18	220	230	230	230	240	250	290	280	270	290	300	310	300	290	290	300	300	260	330	360	320	250	250	230	276
19	230	210	240	280	280	260	290	270	280	290	280	300	300	320	300	290	270	260	320	410	340	270	230	220	281
20	230	220	220	250	250	290	280	260	270	290	300	300	310	300	290	300	270	260	320	330	300	230	210	230	271
21	210	220	240	230	240	220	260	250	270	300	310	320	320	310	350	340	300	270	330	340	360	310	290	250	285
22	240	240	250	240	240	240	250	260	270	300	300	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	250	230	220	...
23	220	220	250	240	250	280	250	260	280	290	300	310	320	320	320	300	290	270	350	440	290	210	220	220	279
24	240	260	320	310	310	270	290	260	260	270	270	290	300	300	310	280	270	260	290	300	250	230	230	230	275
25	230	250	240	230	280	260	300	270	280	300	300	320	340	320	310	270	290	270	350	330	290	210	240	240	280
26	240	240	240	250	240	270	300	250	270	270	290	280	300	300	300	280	280	270	340	380	300	230	210	230	273
27	240	230	230	240	250	260	290	260	270	270	270	300	310	310	310	300	270	270	340	380	330	260	230	230	277
28	220	220	230	250	320	350	290	250	270	280	300	300	310	300	300	290	280	270	330	330	310	310	250	230	283
29	260	270	300	300	290	340	320	260	270	260	280	290	300	290	300	290	300	260	320	330	290	250	250	230	285
30	220	220	220	230	250	250	280	280	280	280	280	280	300	300	300	280	280	250	300	320	290	250	220	210	265
31	210	220	220	230	220	220	250	250	250	290	310	280	300	290	290	280	280	260	300	280	240	210	210	210	254
MEAN*	227	232	240	252	265	265	278	258	268	276	285	295	302	299	296	287	280	264	320	349	310	254	230	226	273

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 69

MAY 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1939

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	5.0	5.1	5.3	5.4	5.4	5.3	5.2	4.9	4.5	...	...
2	...	...	...	5.1	5.4	5.4	5.4	5.3	5.3	4.6	4.6	...	...
3	...	4.8	5.2	5.2	5.3	5.3	5.4	5.2	5.1	4.9	4.4	...	...
4	...	...	5.3	5.4	5.5	5.6	5.4	5.2	5.2	4.8	4.8	...	...
5	...	...c	...c	...c	...c	...c	...c	...c	...c	4.6	4.4	...	...
6	...	...	5.0	5.0	5.1	5.4	5.4	5.3	4.9	4.7	4.7	...	...
7	...	4.6	4.8	5.2	5.1	5.5	5.4	5.2	4.9	4.6	3.9	...	...
8	...	...	4.9	5.0	5.2	5.4	5.4	5.2	5.1	4.8	4.6	...	...
9	...	4.6	5.0	5.2	5.2	5.4	5.5	5.4	5.3	5.0	4.7	...	...
10	...	4.5	5.3	5.2	5.5	5.6	5.6	5.6	5.3	5.0	4.4	...	...
11	...	...	5.0	5.5	5.5	5.6	5.6	5.4	4.8	4.8	4.5	...	...
12	...	...	4.6	5.1	5.3	5.4	5.5	5.4	5.2	4.7	4.3	...	...
13	...	...	4.9	5.2	5.4	5.6	5.6	5.4	5.2	5.0	4.4	...	...
14	...	4.5	4.9	5.0	5.3	5.3	5.5	5.4	5.1	4.8	4.5	[illegible]	...
15	...	...	4.7	5.0	5.4	5.5	5.7	5.4	5.2	4.9	4.3	...	...
16	...	4.5	4.7	5.0	5.2	5.4	5.4	5.4	5.0	4.9	4.3	...	...
17	...	...	5.1	5.3	5.4	5.5	5.5	5.4	5.1	4.8	4.8	...	...
18	...	4.7	5.0	5.3	5.4	5.5	5.3	5.0	5.0	5.0	4.7	...	...
19	...	...	4.5	5.1	5.2	5.4	5.4	5.4	5.2	4.9	4.5	...	...
20	...	4.4	4.8	5.2	5.4	5.4	5.5	5.4	5.1	4.9	4.4	...	...
21	...	4.5	5.0	5.4	5.4	5.5	5.6	5.5	5.3	5.2	4.5	...	...
22	...	4.5	4.8	5.3	5.4	...c	...c	...c	...c	...c	...c	...	...
23	...	...c	...c	5.3	5.4	5.4	5.5	5.4	5.4	4.9	4.6	...	...
24	...	4.5	5.1	4.9	5.2	5.3	5.4	5.5	4.2	4.9	4.6	...	...
25	...	4.3	5.0	5.4	5.4	5.6	5.7	5.5	5.2	5.0	4.5	...	...
26	...	...	4.8	5.2	5.4	5.5	5.6	5.4	5.3	5.0	4.7	...	...
27	...	4.3	5.0	5.3	5.5	5.5	5.6	5.5	5.3	5.0	4.8	...	...
28	...	...	5.0	5.4	5.5	5.6	5.6	5.4	5.2	5.0	4.5	...	...
29	...	...	5.0	5.0	5.4	5.6	5.6	5.5	5.3	5.2	5.0	...	...
30	...	4.8	5.0	5.2	5.4	5.4	5.6	5.6	5.4	5.1	4.9	...	...
31	...	4.5	5.0	5.3	5.2	5.4	5.6	5.5	5.5	5.2	4.7	...	...
MEAN*	...	4.5	4.9	5.2	5.3	5.5	5.5	5.4	5.2	4.9	4.6	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	230	210	210	220	210	220	220	240	...	...
2	...	...	...	230	220	210	210	210	210	230	240	...	...
3	...	240	230	220	210	200	200	200	205	220	240	...	...
4	...	...	240	240	...c	...c	210	200	200	220	240	...	...
5	...	...c	...c	...c	...c	...c	...c	...c	...c	210	220	...	...
6	...	...	230	220	210	200	200	205	210	210	220	...	...
7	...	240	230	220	220	210	210	210	210	230	240	...	...
8	...	...	230	230	230	210	210	200	200	220	230	...	...
9	...	240	230	230	220	210	220	200	210	220	240	...	...
10	...	240	230	220	210	205	210	210	210	210	220	...	...
11	...	...	230	210	220	200	210	200	200	210	230	...	...
12	...	...	230	230	220	200	210	210	200	210	240	...	...
13	...	...	230	215	205	205	200	200	200	220	240	...	...
14	...	240	240	230	220	220	220	210	210	210	230	...	...
15	...	...	230	220	210	210	210	200	210	220	240	...	...
16	...	240	230	215	205	200	190	190	210	230	240	...	...
17	...	...	230	210	210	200	200	200	210	230	230	...	...
18	...	240	230	220	210	200	310	200	210	210	230	...	...
19	...	...	240	230	220	210	200	200	200	200	240	...	...
20	...	240	230	230	210	200	200	190	200	230	240	...	...
21	...	230	230	220	210	200	200	200	210	230	240	...	...
22	...	240	230	230	210	...c	...c	...c	...c	...c	...c	...	...
23	...	...c	...c	220	210	210	200	200	210	210	240	...	...
24	...	240	230	220	210	200	200	190	190	200	230	...	...
25	...	240	230	220	210	210	200	200	200	210	240	...	...
26	...	...	240	210	210	200	205	210	220	220	240	...	...
27	...	240	230	215	200	200	200	210	210	220	230	...	...
28	...	...	230	220	210	210	210	210	210	230	240	...	...
29	...	...	240	220	205	210	210	200	210	220	230	...	...
30	...	240	240	210	200	190	200	200	200	210	220	...	...
31	...	230	230	200	200	210	200	200	200	200	220	...	...
MEAN*	...	239	232	221	212	205	209	202	206	217	234	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 70

MAY 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1939

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.5	0.6	1.2	1.2	2.1	2.2	2.1	2.1	2.0	1.3	1.2	1.2	1.1
2	1.1	1.1	1.2	2.0	2.1	2.1	2.1	2.1	2.0	2.0	1.2	0.8	0.7
3	0.5	0.6	1.2	2.1	2.1	2.2	2.2	2.2	2.1	1.3	1.3	0.8	1.0
4	1.2	1.2	3.0	3.7	3.8	3.6	3.0	3.0	2.3	2.1	2.2	1.2	0.8
5	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.3	1.2	0.8	0.7
6	1.1	1.1	1.2	2.2	2.0	2.2	2.2	2.2	2.0	1.8	1.2	0.8	0.6
7	1.1	0.8	1.2	1.2	2.1	2.1	2.0	2.1	2.0	2.0	1.2	0.8	1.2
8	1.1	0.5	1.2	2.1	2.1	2.0	2.0	2.1	2.0	2.3	0.8	0.8	0.7
9	1.1	1.0	1.1	2.2	2.3	2.1	3.6	2.1	2.0	1.2	1.2	0.8	1.0
10	1.0	0.8	1.2	1.4	1.8	2.1	2.1	2.2	2.0	1.3	1.2	0.8	1.0
11	1.1	1.2	1.2	2.0	2.1	2.2	2.1	2.1	1.8	1.2	1.1	0.8	0.6
12	1.1	1.0	1.2	1.2	2.1	2.1	2.2	2.2	1.3	1.2	0.8	0,8	0.5
13	0.5	0.8	1.2	1.8	2.0	2.0	2.2	2.0	1.8	1.2	1.2	0.8	0.6
14	0.6	1.0	1.2	2.0	2.2	2.2	2.2	2.3	2.1	1.4	0.8	1.0	0.5
15	0.5	0.8	1.2	1.2	2.0	1.1	2.2	2.1	1.8	1.2	0.8	0.8	0.8
16	0.5	0.8	1.2	1.1	2.1	2.1	2.1	2.0	1.4	1.3	1.2	0.8	0.8
17	1.2	1.1	1.1	1.2	2.1	2.1	2.1	2.1	1.8	1.2	1.2	0.8	0.5
18	0.5	0.8	1.2	1.3	2.0	2.1	2.1	2.0	1.3	1.2	1.2	0.5	0.8
19	0.5	0.8	1.2	1.2	1.3	1.3	2.0	2.1	2.0	1.2	1.2	0.8	0.5
20	1.1	0.9	1.2	1.2	1.2	2.0	2.1	2.0	1.2	1.2	1.1	0.6	0.5
21	1.2	1.2	1.2	1.2	2.1	2.2	2.3	2.3	2.1	2.2	1.2	0.6	0.8
22	1.0	1.0	1.2	1.2	1.9	...c	...c	...c	...c	...c	...c	...c	...c
23	1.1	0.8	1.2	1.2	2.0	2.2	2.2	2.1	2.0	1.2	1.1	0.8	0.8
24	1.2	1.2	2.1	2.0	2.0	2.1	2.1	2.0	1.8	1.2	0.8	0.8	0.6
25	0.5	0.8	1.2	1.2	2.0	2.1	2.1	2.0	1.8	1.2	0.8	0.8	1.0
26	0.5	0.8	1.1	1.2	2.0	2.1	2.2	2.1	2.0	1.8	1.2	0.8	1.0
27	0.5	0.5	1.2	2.0	2.1	2.1	2.1	2.1	2.0	2.0	1.2	0.8	1.0
28	1.1	1.8	1.2	1.2	2.1	2.1	3.0	2.4	2.1	1.8	1.2	0.8	0.9
29	0.5	0.8	1.2	1.8	2.2	2.2	2.1	2.1	2.0	1.2	0.8	0.8	1.0
30	1.0	0.8	1.2	1.8	2.0	2.1	2.0	2.1	1.8	1.2	1.2	0.5	1.0
31	1.1	0.8	1.2	1.3	2.1	2.2	2.2	2.1	1.9	1.2	1.1	0.8	0.6
MEAN*	0.9	0.9	1.3	1.6	2.1	2.1	2.2	2.2	1.9	1.5	1.1	0.8	0.8

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.7	2.6	3.4	3.6	3.9	4.0	4.0	3.7	3.7	3.5	3.0	2.3	1.1
2	1.6	2.6	3.4	3.7	3.9	4.0	4.1	4.0	3.8	3.5	3.0	2.3	1.2
3	1.7	2.7	3.2	3.6	3.8	4.0	4.1	3.9	3.8	3.5	3.0	2.3	1.2
4	1.9	3.0	3.6	4.0	...c	...c	4.0	4.0	3.8	3.6	3.2	2.3	1.2
5	...c	...c	...c	...c	...c	...c	...c	...c	...c	3.5	2.9	2.3	1.2
6	1.6	2.6	3.2	3.6	3.7	3.9	4.0	3.8	3.6	3.5	2.9	2.3	1.2
7	1.6	2.5	3.1	3.5	3.7	3.8	3.9	3.8	3.6	3.5	2.9	2.5	1.3
8	1.6	2.5	3.1	3.6	3.7	3.8	3.8	3.7	3.6	3.5	3.0	2.2	1.1
9	1.5	2.5	3.1	3.8	3.9	3.8	4.1	3.8	3.6	3.5	2.9	2.2	1.1
10	1.5	2.6	3.2	3.5	3.7	3.9	3.9	3.8	3.6	3.5	2.9	2.2	1.0
11	1.6	2.6	3.1	3.6	3.7	3.8	3.8	3.7	3.5	3.4	2.8	2.2	1.2
12	1.4	2.5	3.0	3.6	3.8	3.9	4.0	3.9	3.7	3.5	2.9	2.2	1.1
13	1.6	2.5	3.1	3.5	3.8	3.9	3.9	3.8	3.6	3.4	2.5	2.2	1.2
14	1.6	2.6	3.1	3.6	3.8	3.9	3.9	3.8	3.6	3.5	2.8	2.2	1.0
15	1.5	2.5	3.1	3.5	3.7	3.8	3.8	3.8	3.6	3.4	2.9	2.2	1.0
16	1.4	2.5	3.1	3.5	3.7	3.8	3.8	3.7	3.6	3.4	2.9	2.2	2.1
17	1.4	2.4	3.1	3.5	3.7	3.8	3.8	3.8	3.6	3.4	2.8	2.2	1.1
18	1.5	2.5	3.1	3.6	3.7	3.8	3.8	3.7	3.6	3.4	2.4	2.1	1.0
19	1.4	2.5	3.0	3.5	3.7	3.8	3.8	3.7	3.6	3.5	2.9	2.2	1.1
20	1.6	2.4	3.0	3.5	3.7	3.8	3.8	3.7	3.6	3.4	2.9	2.2	1.1
21	1.5	2.5	3.1	3.5	3.8	3.9	3.9	3.8	3.7	3.5	2.9	2.1	1.1
22	1.4	2.5	3.0	3.5	3.6	...c	...c	...c	...c	...c	...c	...c	...c
23	1.4	2.4	3.0	3.5	3.6	3.8	3.8	3.7	3.6	3.4	3.4	2.8	2.1
24	1.5	2.5	3.1	3.6	3.8	3.8	3.8	3.7	3.6	3.5	2.9	2.2	1.0
25	1.4	2.5	3.0	3.5	3.7	3.8	3.9	3.8	3.6	3.4	3.0	2.2	1.2
26	1.5	2.5	3.1	3.6	3.7	3.9	3.9	3.8	3.7	3.5	3.0	2.2	1.2
27	1.5	2.5	3.1	3.5	3.7	3.8	3.9	3.9	3.7	3.5	2.9	2.2	1.2
28	1.5	2.6	3.1	3.6	3.8	3.9	4.1	4.0	3.8	3.6	3.0	2.2	1.1
29	1.6	2.5	3.1	3.6	3.8	3.9	3.9	3.8	3.7	3.5	2.9	2.2	1.2
30	1.4	2.6	3.2	3.6	3.8	3.9	4.0	3.9	3.7	3.4	3.0	2.2	1.1
31	1.4	2.6	3.1	3.5	3.8	3.9	4.0	3.8	3.7	3.6	3.0	2.2	1.1
MEAN*	1.5	2.5	3.1	3.6	3.8	3.9	3.9	3.8	3.6	3.5	2.9	2.2	1.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 71

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1939 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND JUNE 1939

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.8	6.7	6.3	5.5	4.9	5.0	5.6	8.1	10.0	10.9	10.4	9.7	10.6	11.0	11.1	11.4	10.7	10.7	10.4	10.2	8.8	7.7	8.0	9.2	8.8
2	9.0	9.4	8.8	7.0	6.3	6.1	7.3	9.5	10.8	11.9	11.5	10.6	10.3	10.0	10.0	10.6	10.6	10.5	9.6	9.4	9.6	9.6	10.1	9.7	9.5
3	9.0	9.2	8.2	7.0	5.9	6.0	6.8	8.6	10.5	11.3	10.5	9.9	9.9	10.3	10.3	10.1	10.0	10.0	9.5	9.1	8.6	8.4	8.8	9.2	9.0
4	8.7	8.0	7.5	6.2	6.0	5.7	6.6	8.6	10.4	10.1	9.3	9.2	9.4	9.2	9.3	9.3	9.6	9.7	9.2	9.0	9.0	9.2	9.2	10.0	8.7
5	9.2	7.2	6.7	5.4	4.0	3.3	4.7	8.3	10.5	11.5	10.5	10.3	10.0	9.7	9.4	9.1	8.8	8.8	8.4	7.1	7.2	7.1	7.2	6.7	8.0
6	6.9	7.6	7.2	6.6	5.9	5.1	5.5	7.9	10.0	10.4	9.9	9.9	9.6	9.5	9.7	9.2	9.3	9.2	9.0	9.2	8.7	9.0	8.1	7.8	8.4
7	8.5	7.7	6.2	5.4	4.4	3.6	4.7	7.5	9.5	9.8	9.6	9.5	9.6	8.8	9.3	9.6	9.5	9.2	9.2	8.8	8.8	8.0	8.0	8.8	8.1
8	8.0	8.6	7.0	5.1	4.4	3.7	4.7	7.2	8.8	9.1	9.4	9.6	9.4	9.7	9.7	9.4	9.3	8.7	8.2	7.5	7.1	6.5	6.3	p8.8	7.8
9	7.1	6.4	6.4	5.4	4.3	3.9	4.5	7.7	9.8	10.2	...c	...c	...c	...c	9.6	9.6	9.5	8.6	8.3	7.6	7.4	7.4	7.3	7.0	...
10	7.3	7.4	7.6	6.7	5.4	4.2	4.5	6.9	8.1	9.5	8.9	8.9	8.8	9.0	9.0	8.9	8.9	9.2	9.2	9.0	9.5	9.1	8.7	8.6	8.1
11	9.1	8.5	7.4	6.8	5.1	3.3	4.2	7.1	9.5	10.0	9.7	9.6	9.4	9.3	10.0	10.1	9.7	9.4	9.2	8.8	9.1	9.6	7.7	7.5	8.3
12	8.2	8.4	6.9	4.4	4.3	4.5	4.6	6.7	8.1	8.8	9.0	8.0	8.6	8.5	8.6	8.6	8.9	9.0	8.4	8.1	8.4	8.6	7.9	7.4	7.6
13	7.0	7.2	6.5	4.4	3.8	3.4	4.4	7.5	9.3	...c	8.9	8.3	8.6	8.3	8.4	8.6	8.9	9.0	9.1	9.5	7.5	7.5	7.5	8.2	...
14	8.0	7.1	6.8	5.6	3.2	1.8	4.4	7.6	8.8	10.3	10.7	9.4	9.4	8.8	...c	...c	...c	...c	10.0	8.4	8.4	8.4	8.0	7.8	...
15	8.3	8.7	8.4	7.5	5.4	4.2	4.5	7.7	9.9	9.5	9.2	8.4	8.4	8.4	8.5	9.1	9.2	9.6	9.2	8.3	8.2	7.6	8.0	8.0	8.1
16	6.6	6.3	5.6	5.0	4.5	3.5	3.7	7.6	8.8	9.7	10.2	10.2	10.2	9.8	...c	9.6	9.1	8.9	8.3	7.8	7.5	7.1	7.3	7.0	...
17	6.5	6.1	5.8	4.8	3.6	3.0	4.2	7.5	9.8	10.5	10.3	9.6	9.3	9.3	9.7	9.6	9.4	8.7	8.8	8.6	8.9	8.9	7.4	7.1	7.8
18	6.8	7.2	...c	...c	...c	...c	5.5	7.6	9.4	...c	9.7	9.8	9.1	9.1	9.4	9.3	8.8	8.8	8.7	7.5	7.2	6.8	7.7	8.0	...
19	7.2	6.8	7.3	6.3	6.4	4.7	4.8	6.6	8.3	8.8	8.4	9.3	9.2	9.2	...c	...c	...c	8.4	8.4	7.2	7.3	7.7	7.3	7.2	...
20	7.0	6.9	6.4	5.7	5.3	4.8	5.8	7.9	10.2	10.8	10.2	9.2	9.6	9.4	9.4	9.2	9.2	8.8	8.4	7.6	7.1	7.2	7.4	7.8	8.0
21	7.2	6.8	7.3	6.4	5.1	4.9	5.3	7.4	8.2	8.7	9.0	8.7	8.8	8.9	8.7	8.8	9.1	9.2	8.7	7.9	7.8	8.1	6.6	6.4	7.7
22	6.7	6.9	6.8	7.1	6.3	5.9	6.2	8.5	10.4	11.3	11.2	10.7	9.9	10.0	8.9	8.8	8.4	7.6	7.4	6.8	p11.0	6.7	7.1	7.8	8.3
23	6.6	5.4	5.4	5.0	4.0	3.5	4.4	7.0	8.8	9.1	8.7	6.7	8.8	8.6	8.9	8.8	9.3	9.3	8.1	7.5	7.2	7.4	7.4	8.0	7.3
24	7.8	8.5	6.6	5.2	4.5	4.1	4.5	6.7	8.9	9.1	9.2	9.5	8.9	8.9	9.1	9.2	9.2	8.6	7.9	6.4	5.9	p7.8	5.8	6.5	7.4
25	6.2	6.8	6.8	6.3	5.0	4.6	5.1	7.4	9.5	9.5	9.5	9.6	9.6	8.5	8.6	8.2	7.8	7.9	8.1	7.8	8.0	8.5	7.3	6.8	7.6
26	7.0	6.5	5.8	6.1	6.1	5.1	5.7	8.6	9.6	10.7	10.1	9.7	9.8	10.0	9.6	9.5	8.8	8.4	7.9	6.7	6.6	7.2	8.6	8.6	8.0
27	7.5	6.6	6.6	5.7	5.1	4.3	4.3	7.1	9.1	9.8	9.7	9.6	10.1	10.0	9.2	9.3	9.0	8.6	8.2	7.6	7.9	9.2	8.7	7.3	7.9
28	7.0	6.9	7.0	6.4	5.5	5.1	5.4	8.0	9.4	10.5	10.0	9.2	8.7	8.9	8.7	9.2	8.9	8.0	7.9	7.6	8.0	7.3	7.2	7.5	7.8
29	7.4	8.1	7.8	6.6	6.6	6.5	p8.4	6.9	8.1	9.2	9.3	9.2	9.3	9.4	9.2	9.5	9.5	9.0	8.8	8.2	8.4	8.4	8.4	8.1	8.3
30	7.8	6.4	5.7	5.0	3.2	2.2	3.6	6.8	8.1	8.8	8.5	8.5	8.7	8.8	9.1	9.5	9.2	8.5	8.1	7.5	7.7	8.1	8.0	7.4	7.3
31																									
MEAN*	7.6	7.3	6.8	5.9	5.0	4.4	5.1	7.6	9.4	10.0	9.7	9.4	9.4	9.3	9.3	9.4	9.2	9.0	8.7	8.1	8.1	8.0	7.8	7.9	8.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 72

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	220	215	230	230	230	280	260	250	270	280	280	280	290	290	280	280	260	300	320	320	260	230	220	262
2	230	230	240	240	230	230	260	250	260	270	260	290	280	280	280	280	290	260	320	310	270	220	220	220	259
3	220	230	205	220	240	240	250	250	260	270	280	270	280	300	310	280	280	260	300	300	270	220	230	210	257
4	220	240	250	260	270	250	300	250	260	270	280	300	330	310	310	290	280	260	300	330	300	250	210	220	272
5	210	220	240	220	230	220	260	240	250	280	290	310	310	300	300	340	290	260	350	400	370	300	240	210	277
6	230	220	220	230	230	230	270	250	260	280	290	300	350	330	270	270	280	260	290	310	290	250	230	200	264
7	200	200	230	240	230	240	280	260	280	280	300	300	330	310	300	300	290	250	310	330	300	280	250	220	271
8	220	220	210	230	230	240	300	270	290	290	300	300	300	330	330	290	300	260	320	340	350	290	290	250	281
9	210	220	220	220	230	240	290	250	270	280	...c	...c	...c	...c	320	310	300	250	330	360	340	240	230	220	...
10	230	220	210	230	220	250	300	280	290	290	310	320	320	330	320	300	300	250	280	280	270	230	240	220	270
11	230	220	220	230	210	230	280	270	280	300	310	330	310	330	350	320	300	250	290	310	290	240	200	230	272
12	210	220	220	240	240	250	300	290	290	300	310	340	330	330	290	300	300	260	310	300	250	250	250	240	276
13	230	210	210	220	240	240	280	280	300	q300	300	330	330	330	330	340	300	250	280	290	310	400	290	230	284
14	260	250	250	210	240	260	280	250	280	270	300	300	300	310	...c	...c	...c	...c	290	280	280	300	260	240	...
15	240	240	220	210	230	230	280	280	280	290	310	310	330	330	280	280	280	260	300	300	280	230	220	210	268
16	220	240	230	240	240	340	290	290	290	290	300	330	310	330	q340c	350	290	260	310	350	270	230	210	220	282
17	230	220	220	230	220	230	280	280	280	260	280	290	300	320	310	310	300	250	290	280	250	250	240	230	265
18	230	230	...c	...c	...c	...c	260	280	300	...c	290	290	320	320	350	300	300	260	310	370	320	250	250	230	...
19	230	240	250	250	230	250	310	290	280	270	340	330	320	310	...c	...c	...c	260	320	390	350	270	230	220	...
20	230	230	240	260	310	320	290	270	290	280	330	320	340	330	330	310	300	250	310	250	340	290	210	220	285
21	230	240	240	230	230	260	290	310	290	330	340	320	320	360	330	330	310	260	310	340	290	250	230	230	286
22	240	230	230	240	250	240	270	260	260	260	300	310	320	350	350	360	280	260	320	330	320	250	230	210	278
23	210	230	230	230	240	260	290	280	280	300	320	320	320	320	310	290	290	250	300	370	320	270	230	230	279
24	230	220	220	210	240	250	300	270	280	270	290	310	340	350	350	330	320	240	310	410	400	360	290	250	293
25	220	220	230	210	240	260	290	270	260	280	300	330	330	300	300	300	300	260	290	290	250	240	230	220	268
26	210	240	240	230	230	240	280	250	260	270	290	300	350	300	290	290	290	250	340	410	340	240	220	220	274
27	230	230	220	260	230	220	320	270	290	300	300	300	310	350	330	300	310	260	300	320	280	240	210	220	275
28	230	220	220	240	230	240	260	250	260	280	300	300	320	320	350	370	310	260	310	250	300	240	230	230	272
29	250	240	240	270	300	290	320	260	280	280	310	300	330	330	320	350	310	250	300	300	250	230	220	230	282
30	220	230	230	230	230	240	300	250	290	290	310	330	340	310	310	320	310	270	320	330	270	230	220	230	275
31																									
* MEAN	226	227	228	233	239	249	285	267	276	282	301	309	319	321	315	310	296	256	307	325	301	260	235	224	275

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 73

JUNE 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1939

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.9	5.0	5.2	5.4	5.4	5.5	5.3	5.3	5.0	4.3	...	...
2	...	4.5	5.0	5.2	5.3	5.5	5.4	5.4	5.3	5.1	4.7	...	...
3	...	...	4.7	5.3	5.3	5.3	5.5	5.4	5.4	5.0	4.5	...	...
4	...	4.5	5.0	5.1	5.2	5.5	5.6	5.5	5.2	5.0	4.4	...	...
5	...	...	5.0	5.0	5.4	5.3	5.4	5.3	5.0	5.3	4.8	...	...
6	...	...	5.0	5.1	5.3	5.4	5.5	5.4	4.9	4.6	4.4	...	...
7	...	4.7	5.0	5.2	5.4	5.4	5.3	5.2	5.3	5.1	4.8	...	...
8	...	4.0	4.9	5.3	5.4	5.4	5.4	5.3	5.4	5.0	4.8	...	...
9	...	...	4.9	5.4	...c	...c	...c	...c	5.4	5.0	4.8	...	...
10	...	4.5	4.9	5.0	5.3	5.3	5.4	5.1	5.4	4.8	4.8	...	...
11	...	4.4	5.0	5.0	5.4	5.3	5.4	5.2	5.4	5.2	5.0	...	...
12	...	4.5	5.0	5.4	5.3	5.4	5.3	5.4	4.9	4.7	4.7	...	...
13	...	4.6	5.0	...	5.3	5.4	5.3	5.4	5.3	4.8	4.7	...	...
14	...	...	5.0	5.2	5.4	5.4	5.5	5.4	...c	...c	...c	...	...
15	...	4.9	5.1	5.0	5.3	5.4	5.5	5.1	4.9	4.7	4.6	...	...
16	...	4.8	5.3	5.4	5.4	5.5	5.5	5.5	...c	5.4	4.7	...	...
17	...	5.1	5.0	5.0	5.4	5.4	5.5	5.3	5.4	5.3	5.0	...	...
18	...	4.5	5.2	...c	5.4	5.0	5.3	5.4	5.4	5.0	4.7	...	...
19	...	4.8	5.2	5.4	5.6	5.4	5.4	5.3	...c	...c	...c	...	...
20	...	4.7	5.0	5.0	5.4	5.4	5.5	5.3	5.4	5.2	4.8	...	...
21	...	4.6	5.2	5.4	5.4	5.5	5.4	5.5	5.4	5.4	5.2	...	...
22	...	4.3	4.8	5.3	5.4	5.4	5.5	5.4	5.4	5.3	4.8	...	...
23	...	4.6	5.0	5.3	5.4	5.2	5.3	5.2	5.2	4.9	4.7	...	...
24	...	4.3	5.0	5.0	5.2	5.4	5.5	5.4	5.5	5.4	5.0	...	...
25	...	4.4	4.6	5.1	5.4	5.4	5.3	5.2	5.1	4.9	4.7	...	...
26	...	...	4.9	5.0	5.3	5.3	5.5	5.4	5.4	4.9	4.7	...	...
27	...	4.2	5.2	5.2	5.3	5.4	5.5	5.5	5.3	4.9	4.7	...	...
28	...	...	4.4	5.2	5.4	5.4	5.4	5.4	5.4	5.5	5.0	...	...
29	...	...	5.0	5.1	5.3	5.4	5.4	5.4	...c	5.2	5.0	...	...
30	...	...	5.1	5.2	5.3	5.4	5.4	5.3	5.4	5.3	4.8	...	...
31													
* MEAN	...	4.6	5.0	5.2	5.4	5.4	5.4	5.3	5.3	5.1	4.8	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	230	230	220	205	210	200	200	200	210	...	...
2	...	230	240	230	210	200	210	210	200	210	230	...	...
3	...	...	220	200	200	205	200	205	210	220	220	...	...
4	...	240	230	220	210	200	200	200	210	210	220	...	...
5	...	...	230	220	200	200	200	200	200	200	230	...	...
6	...	...	230	220	200	200	200	210	200	230	230	...	...
7	...	240	230	220	210	200	200	200	210	200	220	...	...
8	...	240	230	220	210	200	200	200	200	200	230	...	...
9	...	...	230	210	...c	...c	...c	...c	200	220	230	...	...
10	...	240	230	220	210	200	210	200	210	210	210	...	...
11	...	240	220	220	210	200	200	200	200	220	220	...	...
12	...	240	230	220	210	200	200	190	200	210	210	...	...
13	...	240	220	...	220	200	210	200	200	190	220	...	...
14	...	...	240	220	210	210	190	200	...c	...c	...c	...	...
15	...	240	230	210	200	200	200	190	200	210	240	...	...
16	...	250	230	210	210	210	200	200	...c	210	220	...	...
17	...	240	220	200	200	190	190	190	200	200	220	...	...
18	...	250	240	...c	210	210	200	190	190	220	230	...	...
19	...	250	230	220	200	200	190	190	...c	...c	...c	...	...
20	...	240	240	210	200	210	210	210	200	190	210	...	...
21	...	250	220	220	200	190	205	200	200	210	230	...	...
22	...	240	220	220	220	200	210	210	200	200	220	...	...
23	...	250	230	210	200	210	200	210	200	200	240	...	...
24	...	250	230	220	210	200	190	210	215	200	220	...	...
25	...	250	230	220	200	210	210	200	200	200	220	...	...
26	...	...	240	220	210	200	190	200	200	200	230	...	...
27	...	250	240	230	210	200	200	200	210	220	230	...	...
28	...	...	230	220	210	200	210	200	190	200	240	...	...
29	...	...	240	230	220	200	210	210	220	220	230	...	...
30	...	...	230	220	210	200	200	200	200	210	230	...	...
31													
* MEAN	...	243	230	218	208	202	202	201	202	207	225	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 74

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1939 JUNE 1939

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.5	0.8	1.1	1.8	2.0	2.1	2.1	2.0	1.3	1.2	0.8	0.8	0.5
2	1.1	1.1	1.2	1.2	1.9	2.1	2.1	2.1	1.3	1.2	0.8	0.8	1.0
3	1.1	0.8	1.2	1.2	1.8	2.0	2.0	2.0	1.3	1.2	0.8	0.6	0.6
4	0.6	0.5	0.8	1.2	1.3	2.0	2.0	1.8	1.2	1.2	0.6	0.5	1.0
5	1.1	0.8	1.1	1.2	2.0	2.1	2.1	2.0	1.3	1.2	0.8	0.7	0.8
6	0.5	0.7	0.8	1.2	1.2	2.1	2.1	2.0	1.2	2.4	1.2	0.8	0.5
7	1.0	0.8	1.1	1.2	2.0	2.0	2.1	2.1	1.2	1.2	0.8	0.8	0.5
8	0.5	0.7	1.1	1.2	2.0	2.2	2.1	2.1	1.8	1.2	0.6	0.5	1.0
9	1.2	1.2	1.4	2.1	...c	...c	...c	...c	1.3	1.3	1.2	0.8	0.5
10	0.5	0.8	1.2	1.2	2.0	2.2	2.3	2.1	2.1	1.2	1.2	0.8	1.0
11	1.2	1.2	1.3	1.4	2.0	2.0	2.2	2.1	2.1	1.4	1.2	0.8	0.5
12	0.8	1.2	1.2	2.1	2.1	2.2	2.2	2.2	1.8	1.3	0.8	0.7	0.5
13	1.1	0.8	1.2	...c	...c	...c	...c	...c	1.8	1.2	0.6	0.7	0.5
14	1.1	0.8	0.8	1.8	1.6	1.6	1.8	1.7	...c	...c	...c	...c	0.5
15	1.2	1.2	1.2	2.0	2.1	2.2	2.3	2.2	2.1	1.8	1.2	1.2	1.0
16	0.5	0.8	1.8	2.1	2.2	2.4	2.5	2.3	...c	1.4	0.6	0.6	0.5
17	0.8	0.8	1.2	1.3	1.8	1.8	1.8	1.8	1.8	1.4	0.6	0.7	0.5
18	1.2	...c	...c	...c	1.8	1.8	1.8	1.6	1.4	0.8	0.6	0.6	0.5
19	0.5	0.8	0.8	1.2	2.0	2.2	2.1	1.8	...c	...c	...c	1.4	1.2
20	1.2	1.6	2.5	2.6	2.7	2.7	2.7	2.7	2.5	1.6	1.6	1.4	1.2
21	1.2	1.6	2.7	2.7	2.7	2.1	2.4	2.2	1.3	1.2	0.8	0.7	1.0
22	1.1	0.6	1.1	1.3	1.3	1.4	2.1	1.4	1.3	1.2	0.7	0.6	1.2
23	1.1	0.7	0.8	1.2	1.2	1.4	1.7	1.4	1.3	1.0	0.7	0.7	1.1
24	0.8	0.7	1.3	1.2	2.1	2.1	2.2	2.1	2.1	1.2	1.2	0.7	1.1
25	1.1	1.1	1.1	1.2	2.2	2.1	2.0	1.4	1.3	1.2	0.8	0.7	1.1
26	1.1	0.8	1.2	1.2	1.3	1.3	2.0	2.0	1.2	1.2	0.7	0.6	1.0
27	0.7	0.8	1.2	1.2	1.4	1.3	1.4	1.3	1.2	1.2	1.2	0.7	1.1
28	1.2	0.8	1.2	1.3	2.0	2.1	2.1	2.2	2.0	1.2	0.7	0.7	0.6
29	1.0	0.8	1.2	1.4	2.2	2.1	2.2	2.2	1.4	1.2	0.8	0.8	1.1
30	1.2	0.8	1.2	1.4	2.2	2.1	2.3	2.2	1.3	1.2	0.7	0.8	1.1
31													
MEAN*	0.9	0.9	1.2	1.5	1.9	2.0	2.1	2.0	1.6	1.3	0.9	0.8	0.8

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.4	2.5	3.1	3.5	3.8	3.9	3.9	3.8	3.6	3.3	2.8	2.2	1.0
2	1.5	2.5	3.1	3.5	3.7	3.9	3.9	3.8	3.6	3.3	2.9	2.2	1.2
3	1.6	2.5	2.3	3.6	3.8	3.8	3.9	3.8	3.7	3.4	2.1	2.2	1.2
4	1.6	2.5	2.6	3.5	3.7	3.8	3.8	3.8	3.5	3.3	2.5	2.2	1.2
5	1.4	2.4	3.0	3.5	3.7	3.9	3.9	3.8	3.6	3.3	2.9	2.1	1.1
6	1.3	2.4	3.1	3.5	3.7	3.9	3.9	3.8	3.6	3.7	3.0	2.2	1.2
7	1.4	2.5	3.1	3.5	3.7	3.8	3.9	3.8	3.6	3.4	2.6	2.2	1.4
8	1.3	2.4	3.1	3.5	3.7	3.8	3.9	3.8	3.6	3.4	2.7	2.1	1.1
9	1.2	2.5	3.0	3.5	...c	...c	...c	...c	3.6	3.4	2.4	2.2	1.1
10	1.3	2.4	2.3	3.5	3.7	3.8	3.9	3.8	3.6	3.4	2.8	2.2	1.1
11	1.4	2.5	3.1	3.5	3.7	3.8	3.8	3.8	3.6	3.5	2.6	2.2	1.1
12	1.4	2.4	3.0	3.5	3.7	3.8	3.8	3.7	3.6	3.1	2.5	2.2	1.2
13	1.3	2.4	3.0	...c	3.6	3.7	3.8	3.7	3.6	3.4	2.9	2.2	1.2
14	1.4	2.4	2.9	3.4	3.5	3.6	3.7	3.6	...c	...c	...c	...c	1.2
15	1.4	2.4	3.0	3.5	3.6	3.8	3.8	3.8	3.7	3.5	2.8	2.2	1.1
16	1.2	2.4	3.0	3.5	3.7	3.8	3.8	3.8	...c	3.4	2.5	2.2	1.0
17	1.2	2.4	3.0	3.4	3.6	3.7	3.7	3.7	3.6	3.4	2.7	2.1	1.2
18	1.3	2.4	3.2	...c	3.6	3.7	3.8	3.7	3.5	3.4	2.8	2.2	1.1
19	1.3	2.4	2.2	3.4	3.6	3.8	3.8	3.7	...c	...c	...c	2.2	1.2
20	1.4	2.3	3.0	3.5	3.6	3.8	3.8	3.7	3.5	3.5	2.9	2.3	1.2
21	1.4	2.4	3.0	3.6	3.9	3.9	4.0	4.0	3.5	3.4	2.7	2.3	1.2
22	1.3	2.6	3.0	3.4	3.6	3.7	3.8	3.7	3.6	3.4	2.7	2.2	1.2
23	1.4	2.4	3.0	3.4	3.6	3.9	3.9	3.7	3.6	3.3	3.0	2.2	1.2
24	1.4	2.4	3.1	3.6	3.7	3.7	3.8	3.8	3.7	3.3	2.8	2.3	1.2
25	1.4	2.4	3.2	3.5	3.8	3.9	3.8	3.7	3.7	3.4	2.9	2.3	1.2
26	1.4	2.5	3.1	3.5	3.7	3.8	3.9	3.8	3.7	3.4	2.8	3.0	1.2
27	1.4	2.5	3.1	3.5	3.7	3.9	3.8	3.8	3.7	3.4	2.9	2.4	1.3
28	1.3	2.4	3.1	3.5	3.7	3.8	3.9	3.8	3.6	3.4	3.0	2.3	1.0
29	1.5	2.4	3.1	3.5	3.8	3.8	3.9	3.8	3.6	3.4	3.0	2.2	1.2
30	1.4	2.3	3.1	3.5	3.8	3.8	3.9	3.9	3.7	3.4	2.9	2.3	1.2
31													
MEAN*	1.4	2.4	3.0	3.5	3.7	3.8	3.8	3.8	3.6	3.4	2.8	2.2	1.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 75

JULY 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1939

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.2	7.0	5.5	3.9	2.7	2.5	3.8	7.5	8.9	9.1	8.8	8.4	8.7	9.0	9.1	9.6	9.8	9.6	8.6	8.3	8.4	7.9	7.3	7.2	7.4
2	8.0	7.3	6.7	5.5	5.0	4.6	4.8	7.7	9.1	9.4	9.3	9.2	9.2	9.2	9.4	9.0	9.2	9.5	8.9	8.3	8.1	7.6	6.6	6.5	7.8
3	6.7	7.1	6.8	6.1	5.1	4.7	5.2	7.3	9.2	9.9	10.5	11.1	11.0	10.1	9.5	9.7	9.7	9.4	8.6	8.6	8.0	7.3	7.1	7.3	8.2
4	7.5	6.6	7.5	5.1	4.7	3.7	4.3	8.1	10.2	11.5	10.5	9.3	8.6	8.4	9.1	8.3	8.6	9.2	8.6	9.4	9.5	8.2	7.3	7.8	8.0
5	8.7	7.9	7.6	7.6	7.5	6.3	6.8	7.7	10.0	10.5	9.7	9.5	9.4	9.1	9.1	9.6	9.9	9.2	9.4	9.8	9.4	8.8	7.8	7.7	8.7
6	7.4	7.4	7.9	7.2	6.8	5.4	4.8	8.3	10.4	11.0	10.5	9.6	9.2	9.6	8.9	8.4	8.4	8.5	8.0	7.4	8.3	8.6	9.2	8.0	8.3
7	6.7	6.5	6.1	4.9	4.3	3.7	[illegible]	7.0	8.8	9.5	9.4	8.8	8.6	8.6	8.2	8.2	8.4	7.8	8.4	8.0	7.7	7.3	6.8	6.8	7.3
8	6.0	6.8	6.8	6.4	4.6	4.3	4.3	6.9	8.4	8.5	8.7	8.3	8.4	8.4	9.7	9.1	10.0	9.2	8.8	8.1	8.2	7.7	8.8	8.4	7.7
9	8.0	6.9	6.4	5.8	4.2	3.9	4.0	7.0	8.3	9.3	8.9	8.5	8.6	8.6	8.6	8.8	8.4	8.5	7.9	7.6	7.9	7.5	6.6	5.8	7.3
10	5.4	5.2	4.7	4.7	4.7	4.6	5.0	6.8	8.1	8.9	9.0	9.1	8.9	9.7	9.6	8.9	8.8	8.5	7.8	6.9	6.3	7.7	8.4	8.3	7.3
11	5.9	5.5	5.6	5.9	5.3	4.4	4.4	7.2	9.0	8.9	9.5	10.1	10.2	9.3	8.7	9.0	9.2	9.0	8.5	7.8	7.1	7.0	7.5	p8.3	7.3
12	4.9	5.1	4.7	4.1	3.8	3.7	4.4	7.3	9.0	9.5	10.0	10.0	9.7	9.3	9.9	10.3	10.4	9.9	9.4	8.3	8.9	9.1	8.4	8.0	7.8
13	7.2	7.2	6.9	5.3	4.0	3.3	3.9	6.4	7.8	8.4	8.8	9.2	9.7	10.0	9.4	9.1	8.3	8.2	7.8	6.9	6.4	6.7	6.6	6.9	7.3
14	6.7	6.3	6.0	5.6	p11.5	p8.7	3.4	7.1	8.5	9.1	10.1	9.2	9.3	10.3	10.4	9.9	10.0	9.3	8.6	8.3	8.4	8.6	8.8	7.6	7.6
15	5.9	6.0	6.1	5.3	5.1	5.4	5.7	7.4	8.9	10.4	9.7	9.1	9.0	8.4	8.5	8.5	8.6	8.9	8.1	7.6	...c	...c	...c	...c	...
16	...c	...c	...c	...c	...c	...c	...c	...c	8.6	...	8.4	8.7	9.0	8.6	8.4	8.7	9.0	8.4	9.1	8.4	8.2	8.5	8.2	7.8	...
17	7.8	7.9	7.1	5.6	5.3	4.5	4.6	6.4	8.5	8.6	8.5	8.6	8.3	8.0	7.7	8.0	8.4	8.0	7.9	8.0	8.0	8.1	7.9	7.6	7.5
18	7.2	8.4	7.4	5.0	3.7	2.9	3.8	7.0	8.6	9.0	8.8	8.5	8.0	8.1	7.9	8.3	8.5	8.1	8.3	8.6	8.5	8.2	7.6	7.1	7.4
19	6.7	7.3	7.0	5.3	4.8	4.0	4.3	6.5	7.8	9.2	8.6	8.6	8.6	8.6	8.0	8.1	9.0	9.1	8.9	8.0	8.5	9.1	8.1	7.2	7.6
20	6.1	4.3	p8.4	p8.5	p5.5	2.9	3.8	7.8	10.2	10.1	10.0	10.5	9.9	8.6	8.4	8.1	8.3	8.4	8.9	8.4	9.3	8.8	7.4	7.3	7.0
21	7.8	7.7	7.3	7.1	6.7	5.6	4.1	7.0	8.4	8.9	8.9	7.8	7.4	7.5	7.7	8.2	8.4	9.4	9.2	8.2	8.1	7.3	7.3	7.3	7.6
22	7.3	7.8	7.2	5.9	5.6	5.6	6.0	8.0	9.4	10.2	10.1	9.3	8.6	8.2	8.0	8.2	9.0	8.6	8.6	7.7	7.9	8.6	8.2	7.2	8.0
23	5.9	5.8	5.2	4.7	3.7	3.0	3.8	6.6	8.1	8.7	8.5	8.3	8.2	8.4	8.9	8.7	8.9	8.4	8.2	7.7	7.1	7.8	8.4	p9.3	6.8
24	7.2	6.4	6.0	5.1	4.5	4.7	4.8	6.9	8.3	9.2	8.7	8.4	8.1	7.9	7.6	8.4	8.9	8.8	8.9	8.3	8.7	9.3	7.1	6.9	7.5
25	6.8	5.9	4.7	4.5	p8.0	p9.0	p8.0	6.4	8.4	8.9	8.6	8.6	8.8	8.6	8.6	8.4	8.6	8.7	7.9	7.5	7.3	7.5	7.8	7.8	6.7
26	6.9	6.5	5.9	6.4	5.9	5.1	p8.7	6.8	8.5	8.9	9.3	9.2	9.4	9.6	9.1	10.1	10.3	10.1	9.6	9.5	9.3	8.0	8.0	7.7	7.9
27	7.3	6.2	5.8	5.3	5.7	p11.0	p9.3	6.6	8.5	9.2	9.3	8.9	9.3	10.1	9.8	9.0	9.0	8.3	8.2	7.0	8.2	8.4	7.8	7.8	7.3
28	7.5	7.0	5.9	5.6	5.4	5.6	5.3	7.3	8.6	9.2	8.4	8.0	7.6	7.7	8.0	8.8	8.4	8.5	8.1	8.1	7.9	8.4	7.4	6.7	7.5
29	6.5	5.8	...c	...c	...c	...c	...c	...c	...c	8.9	8.7	8.5	8.3	8.4	8.6	8.5	8.4	7.9	8.0	7.1	6.9	6.7	6.0	6.9	...
30	7.3	7.3	6.1	5.5	...c	4.3	4.2	6.4	7.4	...c	8.0	8.2	8.3	8.5	8.5	...c	...c	...c	8.9	8.5	...c	8.4	8.0	7.9	...
31	...c	...c	...c	4.3	3.8	4.0	4.1	...c	8.6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
MEAN*	6.9	6.7	6.4	5.6	5.3	4.9	5.0	7.1	8.8	9.4	9.2	9.0	8.9	8.8	8.8	8.8	9.0	8.8	8.5	8.1	8.1	8.0	7.7	7.5	7.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 76

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1939

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	210	220	210	230	250	240	270	250	280	300	300	300	320	310	320	270	280	260	300	320	280	240	230	230	268
2	230	220	230	230	250	230	280	250	280	290	310	330	330	350	300	280	280	260	310	300	280	250	250	240	273
3	230	230	230	230	220	270	310	260	280	270	290	300	310	300	310	300	310	270	310	330	300	270	240	230	275
4	220	230	230	220	240	230	260	250	260	280	300	330	350	310	310	310	300	260	300	270	240	230	220	270	268
5	300	300	290	290	330	320	250	250	280	280	300	320	320	310	310	300	300	270	290	260	240	230	240	260	285
6	260	260	260	250	230	220	260	230	260	270	280	300	300	300	330	310	310	260	310	320	280	250	230	220	271
7	220	230	230	220	230	240	300	280	290	280	300	310	310	390	340	300	310	240	280	300	300	300	270	250	280
8	240	220	230	220	220	230	280	280	300	300	330	350	360	330	380	320	320	250	310	330	310	250	240	230	285
9	220	240	220	210	230	230	290	280	280	300	300	320	350	350	370	330	300	260	310	330	290	250	230	220	280
10	230	240	230	240	240	240	290	290	290	300	330	330	320	400	370	280	300	260	320	370	350	270	220	220	289
11	220	250	230	220	220	240	290	250	280	280	280	330	310	320	300	290	270	260	300	370	380	330	260	220	279
12	240	230	230	240	230	240	290	250	300	280	300	300	310	310	320	320	300	280	310	340	290	290	270	220	279
13	220	220	230	220	240	250	310	250	280	310	320	330	320	330	320	300	310	260	320	380	360	230	220	230	282
14	220	230	220	270	440	480	310	280	280	280	280	320	310	310	330	300	290	250	300	350	280	220	220	240	292
15	230	230	240	250	250	280	300	290	290	300	310	350	420	330	330	350	310	260	300	330	...c	...c	...c	...c	...
16	...c	...c	...c	...c	...c	...c	...c	...c	270	310	330	360	330	310	310	350	320	260	310	320	280	240	240	230	...
17	250	230	220	240	240	280	320	280	290	300	320	360	360	390	360	340	330	260	290	280	250	215	230	230	286
18	240	240	220	240	230	260	280	280	280	300	300	380	330	370	380	340	300	260	300	300	290	250	250	240	286
19	220	220	220	230	240	280	300	320	290	300	320	350	400	360	360	330	320	250	290	330	310	230	210	220	288
20	220	240	420	340	320	310	290	250	270	290	310	290	340	340	370	320	300	260	280	280	250	230	230	220	290
21	240	250	260	250	240	230	230	280	280	280	330	420	370	480	420	390	330	260	300	340	330	290	280	270	306
22	250	250	260	270	270	260	250	270	300	280	300	330	350	310	q310b	310	300	250	300	350	300	270	240	210	270
23	230	240	240	230	240	280	310	260	300	310	330	350	360	330	330	350	320	300	260	340	290	250	240	230	288
24	230	240	220	250	250	240	270	280	300	300	300	330	450	360	350	390	300	240	280	270	260	230	200	220	282
25	210	210	230	280	390	370	320	280	290	300	300	330	370	370	380	330	290	260	300	360	320	250	210	220	299
26	220	230	250	240	280	330	310	300	300	300	300	310	380	370	360	310	310	260	290	270	250	230	240	240	287
27	240	260	270	290	300	270	290	290	290	280	330	330	360	350	330	310	300	250	300	360	310	260	230	230	293
28	230	230	230	260	290	250	250	270	290	320	300	400	430	400	310	320	320	270	300	310	280	230	230	230	290
29	240	230	...c	...c	...c	...c	...c	...c	...c	300	300	350	380	380	360	380	350	260	310	370	330	290	250	210	...
30	210	220	230	250	240	280	300	300	290	...c	330	360	...c	...c	...c	...c	...c	...c	...c	...c	...c	230	220	230	...
31	230	230	230	240	260	250	300	290	300	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
MEAN*	232	236	242	247	263	270	287	272	286	293	308	336	350	347	340	322	306	260	299	324	294	252	236	232	285

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 77

JULY 1939 — JULY 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	5.0	5.3	5.4	5.4	5.4	5.4	5.3	4.7	4.5	...	...
2	...	...	5.0	5.1	5.3	5.4	5.4	5.5	5.3	4.8	4.6	...	...
3	...	...	4.9	5.0	5.3	5.4	5.5	5.4	5.4	5.2	4.8	...	...
4	...	...	5.0	5.3	5.5	5.5	5.5	5.4	5.2	5.1	5.0	...	...
5	...	...	5.0	5.2	5.4	5.4	5.5	5.4	5.2	4.9	4.8	...	...
6	...	...	5.0	4.8	5.2	5.4	5.5	5.4	5.2	5.0	4.8	...	...
7	...	4.5	5.1	5.3	5.4	5.4	5.5	5.5	5.3	4.8	4.7	...	...
8	...	4.6	5.0	5.3	5.5	5.6	5.6	5.5	5.5	5.2	5.0	...	...
9	...	4.2	4.8	5.2	5.2	5.4	5.3	5.5	5.5	5.2	4.7	...	...
10	...	4.6	5.2	5.2	5.4	5.4	5.5	5.6	5.4	5.0	4.8	...	...
11	...	...	5.2	5.3	5.3	5.5	5.5	5.3	5.2	5.1	4.5	...	...
12	...	...	5.4	5.2	5.4	5.4	5.5	5.5	5.4	5.4	5.0	4.2	...
13	...	...	4.7	5.4	5.5	5.5	5.3	5.4	5.4	5.0	4.7	...	...
14	...	4.3	4.9	5.0	4.9	5.4	5.4	5.4	5.4	5.0	4.8	...	...
15	...	4.9	5.0	5.2	5.3	5.4	5.6	5.3	5.4	5.4	5.0	...	...
16	...	...	4.7	5.2	5.2	5.3	5.5	5.1	4.9	5.2	4.8	...	...
17	...	4.3	4.7	5.0	5.3	5.4	5.4	5.4	5.3	5.0	4.8	...	...
18	...	4.2	4.7	5.0	4.9	5.3	5.1	5.3	5.5	5.1	4.6	...	...
19	...	4.8	4.9	5.0	5.2	5.3	5.2	5.3	5.3	5.1	5.0	...	...
20	...	...	4.8	5.1	5.2	5.3	5.3	5.3	5.5	5.1	4.4	...	...
21	...	4.4	4.9	5.1	5.4	5.4	5.2	5.4	5.3	5.4	5.0	...	...
22	...	4.7	4.8	5.0	5.1	5.4	5.4	5.1	...b	4.9	5.0	...	...
23	...	...	5.0	5.1	5.3	5.4	5.5	5.1	5.1	5.1	5.0	...	...
24	...	4.3	4.6	5.1	4.9	5.1	5.5	5.4	5.0	5.3	4.5	...	...
25	...	3.9	4.8	5.0	5.2	5.2	5.3	5.4	5.4	5.0	4.4	...	...
26	...	4.4	4.9	5.0	5.0	5.2	5.4	5.4	5.4	5.0	4.7	...	...
27	...	4.4	4.9	5.2	5.4	5.3	5.4	5.3	5.4	4.9	5.0	...	...
28	...	4.2	4.8	5.4	5.2	4.9	5.4	5.5	5.3	4.9	5.3	...	...
29	...	...c	...c	5.4	5.3	5.2	5.4	5.3	5.4	5.4	5.2	...	...
30	...	4.3	4.7	...c	5.0	5.3	...c	...c	...c	...c	...c	...	...
31	...	4.4	4.9	...c	...c	...c	...c	...c	...c	...c	...c	...	...
* MEAN	...	4.4	4.9	5.2	5.2	5.4	5.4	5.4	5.3	5.1	4.8	4.2	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	220	210	210	200	200	220	240	...	...
2	...	...	230	220	220	210	220	200	200	220	230	...	...
3	...	...	240	220	210	210	210	210	210	220	230	...	...
4	...	...	230	220	210	220	200	200	200	220	240	...	...
5	...	...	240	230	220	220	210	220	230	230	240	...	...
6	...	...	260	210	210	220	200	200	210	230	240	...	...
7	...	250	230	210	210	200	210	200	200	210	230	...	...
8	...	240	220	220	200	200	210	210	230	220	220	...	...
9	...	260	230	220	210	200	200	200	200	220	230	...	...
10	...	250	230	220	210	210	210	200	210	200	200	...	...
11	...	...	230	200	200	200	190	210	210	220	230	...	...
12	...	...	230	220	200	210	210	200	200	210	240	230	...
13	...	...	230	210	210	200	200	200	200	210	230	...	...
14	...	260	240	220	220	210	210	200	210	230	240	...	...
15	...	250	240	230	210	210	200	210	...b	220	240	...	...
16	...	...	240	230	220	210	210	200	200	210	210	...	...
17	...	260	230	210	210	210	200	200	200	210	230	...	...
18	...	260	230	220	210	200	200	200	200	210	220	...	...
19	...	250	230	220	200	210	210	200	210	210	230	...	...
20	...	...	230	220	220	210	210	200	220	220	230	...	...
21	...	250	230	220	220	220	210	200	220	220	240	...	...
22	...	250	230	230	210	210	210	200	...b	240	240	...	...
23	...	...	230	230	200	210	200	210	210	220	220	...	...
24	...	250	230	210	200	190	200	200	200	210	230	...	...
25	...	250	240	220	200	200	200	190	210	220	220	...	...
26	...	260	230	230	200	200	200	210	210	230	220	...	...
27	...	250	230	200	190	200	200	210	200	200	220	...	...
28	...	240	230	220	200	200	200	200	200	210	220	...	...
29	...	...c	...c	220	210	210	200	200	200	200	230	...	...
30	...	250	240	...c	210	200	...c	...c	...c	...c	...c	...	...
31	...	250	230	...c	...c	...c	...c	...c	...c	...c	...c	...	...
* MEAN	...	252	233	219	209	207	205	203	207	217	229	230	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 78

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1939

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	0.7	1.2	1.2	2.3	2.3	2.3	2.2	2.1	1.3	1.3	0.7	1.1
2	1.1	0.8	1.2	2.0	2.2	2.3	2.3	2.1	2.1	1.2	0.8	0.8	1.0
3	1.2	0.8	1.2	2.1	2.3	2.4	2.4	2.3	2.1	1.2	0.8	0.8	0.7
4	0.8	0.8	1.2	1.3	2.1	2.2	2.2	2.2	2.0	1.4	1.2	0.8	1.1
5	1.0	1.6	2.0	2.2	2.4	2.3	2.4	2.4	2.2	1.2	0.8	0.8	0.7
6	1.1	0.8	1.2	1.2	2.1	2.3	2.3	2.1	2.1	2.3	2.3	0.8	1.0
7	1.1	0.8	1.2	1.3	2.2	2.3	2.4	2.3	2.1	1.3	1.2	0.7	1.0
8	1.0	0.7	1.2	2.2	2.0	2.2	2.3	3.0	3.5	1.3	1.1	0.8	1.1
9	1.1	0.8	1.2	2.1	2.2	2.3	2.3	2.3	2.2	2.0	1.3	0.8	1.1
10	1.1	1.2	1.3	1.8	2.3	2.3	2.4	2.3	2.3	1.4	0.8	0.7	1.1
11	1.0	0.8	1.2	2.3	2.2	2.3	2.3	2.3	2.1	1.3	0.6	0.8	1.1
12	1.1	0.7	1.4	1.2	1.4	2.4	2.2	2.3	2.1	1.2	0.8	1.6	1.0
13	1.1	0.8	1.2	1.3	1.2	2.2	2.2	2.3	2.0	1.3	0.8	0.8	1.0
14	1.1	0.8	0.8	1.2	2.2	2.2	2.3	2.1	1.3	1.2	0.7	0.7	1.1
15	1.2	0.7	1.2	1.2	1.2	2.5	2.1	1.4	...b	2.2	0.8	0.8	1.1
16	...d	...d	0.8	1.2	1.3	2.1	2.6	2.1	2.0	1.3	1.2	0.8	1.0
17	1.0	0.7	0.8	1.2	1.3	2.1	2.2	2.1	1.3	1.2	0.7	0.8	1.0
18	1.1	0.8	1.0	1.2	1.3	1.4	2.1	2.0	2.2	1.3	0.8	0.7	1.1
19	1.0	0.7	0.7	1.2	1.3	2.2	2.3	2.8	2.3	2.2	1.2	0.8	1.1
20	1.2	1.2	1.2	1.2	1.8	1.4	2.0	2.0	1.3	1.2	0.8	0.8	1.0
21	0.7	0.9	1.2	2.1	2.0	2.1	2.2	2.1	3.0	1.2	0.7	0.7	1.0
22	0.8	0.7	0.8	1.3	1.3	2.1	2.0	2.1	p3.8b	2.3	1.2	0.8	1.0
23	1.1	0.6	0.8	1.2	1.4	1.4	1.3	1.3	1.3	1.2	1.2	0.8	1.0
24	1.2	0.7	0.7	0.8	1.2	1.3	1.4	1.3	1.2	1.2	0.8	0.8	1.1
25	1.1	0.7	0.8	1.2	1.3	1.4	2.0	2.1	2.0	1.3	1.2	1.2	1.0
26	1.1	0.8	1.2	1.2	1.4	2.2	2.1	2.1	2.1	1.2	1.2	0.8	1.1
27	0.7	0.7	0.8	1.2	1.3	2.1	2.2	2.1	2.0	1.2	1.2	0.8	1.2
28	1.2	0.7	1.2	1.3	2.0	2.2	2.2	2.3	2.1	1.4	1.2	0.8	1.1
29	...c	...c	...c	1.3	2.1	2.2	2.2	2.1	2.2	2.0	1.2	0.8	1.1
30	0.5	1.1	1.3	...c	2.0	2.1	...c	...c	...c	...c	...c	0.7	1.2
31	1.0	0.7	1.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
* MEAN	1.0	0.8	1.1	1.5	1.8	2.1	2.2	2.1	2.0	1.5	1.0	0.8	1.0

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.4	2.4	3.1	3.5	3.8	4.0	4.0	3.8	3.8	3.5	3.1	2.3	1.2
2	1.4	2.4	3.2	3.5	3.8	4.0	4.1	3.9	3.7	3.5	3.1	2.3	1.2
3	1.3	2.5	3.2	3.5	3.8	4.0	4.0	3.9	3.7	3.5	2.8	2.4	1.2
4	1.4	2.5	3.2	3.6	3.8	4.0	4.0	3.9	3.8	3.6	3.0	2.3	1.2
5	1.0	2.4	3.0	3.5	3.8	3.9	4.0	3.8	3.7	3.5	3.0	2.3	1.3
6	1.5	2.4	3.1	3.5	3.8	4.0	4.0	3.9	3.7	3.6	3.3	2.3	1.2
7	1.3	2.4	3.1	3.6	3.8	3.8	3.9	3.9	3.8	3.5	3.0	2.3	1.2
8	1.3	2.4	3.1	3.6	3.8	4.0	4.0	4.1	4.1	3.5	3.0	2.3	1.3
9	1.4	2.5	3.1	3.5	3.8	4.0	4.0	3.9	3.8	3.8	3.0	2.4	1.4
10	1.4	2.5	3.1	3.5	3.7	3.9	3.9	3.9	3.8	3.5	3.0	2.4	1.4
11	1.4	2.5	3.2	3.5	3.8	4.0	4.0	4.0	3.8	3.5	3.0	2.4	1.2
12	1.4	2.4	3.1	3.6	3.8	3.9	4.0	3.9	3.8	3.5	3.0	2.4	1.3
13	1.3	2.4	3.0	3.5	3.7	3.8	3.9	3.8	3.7	3.4	3.0	2.4	1.3
14	1.4	2.4	3.0	3.5	3.8	3.9	4.0	3.8	3.7	3.5	3.0	2.3	1.2
15	1.4	2.4	3.1	3.5	3.7	3.9	3.9	3.8	...b	3.6	3.0	2.3	1.3
16	...d	...d	3.0	3.4	3.6	3.8	4.0	3.8	3.6	3.4	2.9	2.3	1.2
17	1.2	2.4	2.9	3.4	3.7	3.8	3.8	3.8	3.7	3.4	3.0	2.2	1.2
18	1.3	2.4	2.9	3.5	3.6	3.7	3.8	3.7	3.6	3.4	3.0	2.3	1.2
19	1.2	2.4	3.0	3.4	3.6	3.8	4.0	3.8	3.7	3.5	3.0	2.3	1.2
20	1.3	2.4	3.0	3.5	3.6	3.7	3.7	3.7	3.6	3.4	2.9	2.3	1.1
21	0.7	2.4	3.0	3.5	3.7	3.7	3.7	3.8	3.8	3.4	3.0	2.3	1.2
22	1.2	2.4	3.0	3.5	3.7	3.8	3.9	3.8	...b	3.6	3.1	2.3	1.2
23	1.3	2.4	3.0	3.4	3.6	3.8	3.8	3.8	3.7	3.4	2.9	2.4	1.2
24	1.2	2.3	3.0	3.4	3.6	3.7	3.8	3.8	3.6	3.4	2.9	2.4	1.2
25	1.4	2.4	2.5	3.4	3.5	3.7	3.8	3.7	3.6	3.4	2.9	2.3	1.2
26	1.3	2.3	2.9	3.4	3.5	3.7	3.8	3.8	3.5	3.4	2.8	2.3	1.3
27	1.4	2.3	2.9	3.4	3.7	3.7	3.8	3.8	3.6	3.4	2.9	2.3	1.2
28	1.4	2.4	3.0	3.4	3.7	3.8	3.9	3.8	3.7	3.5	3.0	2.4	1.2
29	...c	...c	...c	3.5	3.8	3.9	3.9	3.8	3.7	3.5	3.0	2.4	1.2
30	1.2	2.4	3.1	...c	3.7	3.9	...c	...c	...c	...c	...c	...c	...c
31	1.3	2.4	3.1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
* MEAN	1.3	2.4	3.0	3.5	3.7	3.8	3.9	3.8	3.7	3.5	3.0	2.3	1.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 79

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1939 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — AUGUST 1939

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.8	7.8	8.3	8.5	8.4	8.5	9.1	9.1	8.4	8.2	8.9	9.5	7.6	...
2	7.8	6.8	6.1	4.4	4.5	4.5	4.8	6.5	7.9	p8.5	7.9	8.2	8.1	7.8	8.1	8.2	6.9	8.9	8.2	8.1	7.7	8.0	7.3	7.3	7.3
3	6.5	5.5	4.8	4.8	3.9	3.2	4.2	7.2	9.0	10.1	9.9	6.6	8.4	8.3	8.5	8.6	8.7	8.7	6.5	9.0	6.4	6.9	8.4	7.4	7.5
4	7.4	7.6	6.5	4.6	3.3	2.4	3.8	7.1	8.8	9.4	8.9	8.4	8.1	8.1	7.8	7.6	7.9	6.2	6.1	7.8	8.0	8.0	7.7	7.5	7.2
5	6.7	6.5	6.2	5.9	4.7	4.0	4.7	7.4	8.8	10.5	9.9	9.4	8.8	8.8	8.5	8.4	8.2	8.5	8.9	7.8	8.0	8.5	8.1	8.5	7.7
6	9.1	8.5	7.4	5.8	5.0	4.5	5.0	7.5	8.9	9.8	9.4	8.8	7.9	8.2	7.9	7.8	8.4	8.6	8.5	8.1	8.1	8.0	7.8	8.2	7.8
7	7.3	7.5	7.2	5.6	4.5	3.3	4.2	7.4	8.9	10.3	9.8	8.8	8.3	8.0	8.1	7.7	7.8	8.5	8.4	8.2	8.0	7.7	7.1	6.8	7.5
8	p6.8f	6.7	6.5	5.2	4.4	3.3	4.3	7.5	8.6	9.5	9.6	8.2	8.3	8.2	8.1	7.8	7.7	8.2	8.7	8.6	6.4	8.6	8.5	8.2	7.5
9	7.8	7.2	7.7	6.1	5.4	3.8	4.3	7.3	9.3	9.9	9.6	8.4	8.6	7.9	8.0	7.8	6.4	8.4	8.6	8.5	8.1	7.1	6.3	7.2	7.6
10	p7.0f	6.8	6.9	6.0	4.5	3.2	4.2	7.2	9.6	10.8	9.7	p9.7c	9.6	9.4	9.2	9.4	9.8	10.3	9.8	8.5	7.8	7.9	6.4	9.6	8.1
11	8.7	7.5	6.6	6.2	5.6	5.2	5.4	7.8	9.1	9.9	p9.2c	9.0	8.9	9.3	9.5	8.9	8.5	8.6	8.7	8.1	7.5	6.6	9.3	8.8	8.1
12	9.4	7.3	...f	...f	...f	...f	...f	9.1	9.7	10.4	11.4	10.6	9.7	9.7	9.7	9.4	9.3	8.9	8.5	7.7	7.7	7.5	8.1	8.0	...
13	7.9	8.1	7.4	7.6	p6.8f	5.9	5.9	8.4	9.5	9.8	9.7	9.2	8.9	9.2	9.7	9.5	9.3	8.8	6.9	8.5	8.7	8.2	7.0	6.7	8.3
14	8.5	8.9	7.4	6.7	5.8	5.4	5.6	8.0	9.7	9.6	9.6	9.0	9.2	8.9	8.7	8.4	8.3	8.8	8.6	7.5	7.6	8.0	p7.7f	p7.3f	8.0
15	p7.1f	7.1	7.0	5.6	4.8	3.6	4.5	7.5	9.2	p9.6c	9.1	9.0	8.7	8.6	9.1	9.9	10.2	9.9	9.7	9.2	9.2	9.2	8.9	8.6	8.1
16	8.7	8.4	8.1	7.3	p7.3f	p7.2f	p7.1f	7.0	8.7	9.2	8.8	8.6	9.6	10.1	9.9	9.3	9.1	8.8	9.2	8.6	8.4	8.5	7.9	7.7	8.5
17	7.7	6.8	6.1	5.5	5.5	4.2	5.1	8.4	10.4	11.2	11.2	11.1	11.1	10.9	11.3	11.3	11.2	11.2	10.4	9.1	8.8	8.5	8.5	8.2	8.9
18	8.4	8.4	8.4	6.6	5.0	4.1	4.7	7.9	9.1	9.2	8.6	8.4	8.1	8.2	8.0	8.1	8.8	8.4	8.6	8.2	8.4	8.9	8.8	7.2	7.9
19	7.0	7.1	6.3	5.6	4.7	4.3	5.1	7.7	9.2	9.2	8.7	8.5	8.7	8.2	8.9	9.0	9.2	9.3	9.4	9.4	9.9	10.2	10.0	9.0	8.1
20	8.6	8.3	8.6	7.0	6.0	6.3	6.7	8.4	9.8	10.8	11.0	10.5	10.8	10.8	11.2	11.5	11.2	10.9	10.6	9.7	9.3	9.9	6.4	8.6	9.4
21	9.5	9.3	7.7	7.3	6.7	5.7	5.8	7.5	8.5	8.8	9.0	9.3	9.9	10.0	10.0	10.4	10.0	9.6	8.6	7.8	7.9	7.4	7.0	p8.0f	8.4
22	9.1	8.4	7.5	6.4	5.6	p4.7f	3.8	7.2	8.6	9.8	10.4	11.3	10.9	10.8	10.2	9.7	9.6	9.2	9.3	9.1	7.8	8.2	7.7	8.6	8.5
23	8.3	7.4	7.8	...f	...f	...f	...f	9.0	9.8	10.8	10.3	10.3	11.0	10.9	10.7	10.1	9.4	9.0	8.9	7.6	10.7	7.6	8.6	8.4	...
24	8.4	6.8	6.3	5.1	4.3	3.6	5.0	7.3	8.0	8.9	9.0	9.3	9.7	9.9	9.5	9.4	9.2	9.1	9.1	8.3	8.3	8.2	8.7	8.6	7.9
25	7.8	7.5	7.0	6.3	5.6	5.7	6.0	7.6	8.9	9.5	9.3	p9.5c	9.6	9.6	10.0	10.1	10.4	10.7	10.2	9.4	9.0	9.6	10.5	9.8	8.7
26	7.9	8.0	6.8	5.9	4.7	4.4	4.7	7.4	9.0	9.2	9.1	9.6	10.0	9.7	9.5	10.3	10.1	10.2	10.0	8.5	8.0	8.3	8.4	8.5	8.3
27	7.2	7.0	6.4	5.2	4.9	4.8	5.5	7.7	8.9	9.2	9.3	9.7	9.2	9.8	9.9	9.9	9.9	10.2	10.3	9.4	9.1	9.3	9.2	8.5	8.4
28	7.2	6.7	5.9	4.9	4.4	3.8	5.2	8.2	9.6	9.9	9.7	9.7	9.6	9.6	9.6	9.5	9.6	9.3	8.9	7.9	7.5	7.8	p8.1f	8.4	8.0
29	7.6	6.7	5.6	5.1	4.7	4.6	5.6	8.3	10.4	11.9	12.3	12.1	11.4	10.1	10.0	10.3	10.1	10.0	9.7	9.5	10.0	9.8	9.6	9.7	9.0
30	8.6	8.1	7.1	5.3	4.1	4.2	5.4	8.2	9.8	10.7	10.9	11.0	11.5	11.8	11.6	p11.0c	10.1	10.5	10.7	10.8	10.8	10.6	9.4	9.1	9.2
31	9.0	9.6	8.4	7.5	6.4	5.1	6.0	8.6	9.9	9.9	9.7	9.5	9.4	9.3	9.6	9.4	9.2	9.1	9.1	7.7	7.4	7.8	7.6	7.5	8.4
MEAN*	8.0	7.6	7.0	5.9	5.1	4.5	5.1	7.7	9.2	9.9	9.7	9.4	9.4	9.3	9.3	9.3	9.3	9.3	9.2	8.6	8.5	8.5	8.3	8.2	8.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 80

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1939 AUGUST 1939

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	400	370	390	400	360	320	260	280	280	270	240	210	220	...
2	220	230	220	240	270	310	300	300	320	q340c	360	390	420	390	380	380	320	240	300	300	230	230	230	220	298
3	220	230	230	230	230	250	270	250	280	280	290	320	350	380	400	360	300	260	290	310	250	240	220	220	278
4	220	210	220	220	240	260	280	280	310	300	300	420	390	400	400	400	340	260	290	300	250	230	230	220	290
5	220	230	230	230	240	250	280	270	290	300	330	330	360	340	360	360	300	270	300	350	280	240	230	230	284
6	230	230	230	240	250	250	260	270	300	320	330	380	390	390	300	400	400	250	300	340	290	240	230	220	293
7	230	230	230	230	240	250	280	280	270	300	340	390	370	360	380	390	300	260	300	340	320	280	250	240	294
8	230	240	240	230	230	250	260	260	280	330	350	360	370	400	360	330	310	270	280	290	270	250	240	230	286
9	230	230	240	240	230	240	260	270	310	310	320	380	370	330	450	390	360	260	300	340	320	330	280	240	301
10	220	230	230	230	230	230	270	250	280	310	340	q350c	q360b	370	320	350	400	280	320	360	340	290	230	230	292
11	230	240	250	250	240	260	300	250	310	300	q330c	380	360	360	330	300	310	280	310	370	300	240	230	230	290
12	210	400	360	340	270	300	300	270	300	290	300	300	320	310	320	310	310	270	320	370	320	280	250	230	302
13	240	270	280	270	280	230	270	290	290	320	310	340	350	350	360	350	360	270	300	330	320	270	290	250	300
14	230	210	230	240	270	290	310	290	290	300	340	330	420	390	390	310	280	270	300	350	330	240	260	250	297
15	220	240	240	250	240	240	290	280	300	q310c	320	350	380	340	440	400	330	280	300	310	280	250	230	230	294
16	230	250	280	350	410	350	310	260	300	300	360	330	330	390	380	350	330	260	320	350	300	250	240	240	311
17	240	250	240	250	240	250	290	280	280	300	310	310	390	310	340	330	310	250	310	300	240	250	250	230	281
18	250	240	250	240	240	250	280	280	310	350	340	350	410	380	350	310	300	280	320	360	270	230	250	230	295
19	230	240	230	260	260	290	310	280	300	300	350	350	340	350	360	330	290	290	310	320	250	250	250	250	291
20	240	240	230	240	260	270	300	280	300	300	290	350	360	340	310	300	300	260	300	330	300	240	250	240	285
21	240	240	250	250	240	250	310	260	330	340	330	340	390	350	350	340	360	260	320	360	310	250	310	330	305
22	260	250	250	290	310	360	330	320	290	300	300	330	320	320	330	320	300	300	330	380	390	340	380	350	319
23	340	300	340	370	400	360	310	260	320	360	410	380	380	360	360	330	330	270	320	350	390	260	240	230	332
24	240	260	250	260	280	260	300	320	320	350	360	360	350	350	380	330	300	270	300	360	330	230	230	230	301
25	260	240	240	250	280	300	300	260	300	310	320	q340c	350	360	370	330	300	270	300	340	300	250	230	240	293
26	240	250	240	240	250	280	300	260	300	300	330	340	340	340	330	330	330	280	320	350	260	260	240	240	290
27	250	250	250	260	260	270	310	270	300	310	330	360	330	360	380	350	340	280	320	350	320	250	240	230	299
28	240	250	240	250	270	300	280	290	280	320	350	350	340	350	300	330	340	280	330	450	390	330	260	240	307
29	240	260	270	270	270	280	300	270	280	290	300	300	350	350	310	310	300	270	320	380	320	250	240	230	290
30	240	250	240	240	260	270	300	260	280	300	300	300	330	330	330	q320c	300	280	300	300	250	250	240	240	280
31	230	250	250	250	260	270	300	290	310	310	320	320	330	340	q320b	310	320	280	320	420	380	270	250	240	298
MEAN*	237	248	249	257	265	274	292	275	298	312	329	349	362	358	358	342	322	270	308	343	302	259	249	240	296

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 81

AUGUST 1939 | AUGUST 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...c	...c	...c	...c	5.4	5.3	5.4	5.4	5.4	5.0	...	...
2	...	4.4	5.1	p5.2c	5.3	5.5	5.4	5.4	5.4	5.4	5.0	...	...
3	...	...	4.8	5.0	5.1	5.2	5.3	5.3	5.3	5.0	4.4	...	...
4	...	4.5	5.3	5.0	5.3	5.5	5.4	5.4	5.4	5.0	4.8	...	...
5	...	4.2	4.8	5.0	5.3	5.2	5.3	5.0	5.0	4.9	4.5	...	...
6	...	4.3	4.8	5.2	5.2	5.3	5.4	5.2	5.1	5.2	5.4	...	...
7	...	4.3	4.6	5.2	5.3	5.4	5.3	5.3	5.2	5.3	4.5	...	...
8	...	4.3	4.9	5.3	5.4	5.4	5.4	5.2	5.2	5.1	4.7	...	...
9	...	4.4	5.3	5.3	5.3	5.3	5.4	5.5	5.5	5.3	5.2	...	...
10	...	...	4.7	5.3	5.4	p5.4c	p5.4b	5.3	5.2	5.2	5.4	...	...
11	...	...	5.2	5.2	p5.4c	5.5	5.3	5.4	5.2	5.0	4.6	...	...
12	...	...	5.0	5.2	5.3	5.4	5.5	5.4	5.2	5.2	5.0	...	...
13	...	4.1	4.8	5.4	5.4	5.4	5.5	5.4	5.5	5.4	5.4	...	...
14	...	4.1	4.8	5.2	5.3	5.4	5.6	5.4	5.4	5.0	4.2	...	...
15	...	4.7	5.0	p5.2c	5.4	5.4	5.5	5.3	5.6	5.3	5.2	...	...
16	...	...	5.0	5.2	5.3	5.3	5.4	5.4	5.4	5.4	5.0	...	...
17	...	4.5	5.0	5.2	5.4	5.4	6.0	5.4	5.5	5.4	4.9	...	...
18	...	4.5	5.2	5.4	5.5	5.4	5.5	5.5	5.3	4.9	4.5	...	...
19	...	4.1	5.0	5.2	5.3	5.4	5.3	5.4	5.4	5.3	4.5	...	...
20	...	3.8	5.2	5.2	5.3	5.3	5.4	5.4	5.2	4.8	4.5	...	...
21	...	...	5.1	5.4	5.3	5.4	5.5	5.3	5.1	5.2	5.2	...	...
22	...	4.8	5.0	5.0	5.2	5.4	5.4	5.4	5.4	5.0	4.5	...	...
23	...	...	5.0	5.2	5.8	5.5	5.5	5.4	5.4	5.2	4.9	...	...
24	...	5.0	5.0	5.2	5.3	5.4	5.3	5.5	5.5	5.0	4.5	...	...
25	...	...	4.8	5.2	5.4	p5.5c	5.6	5.6	5.1	5.1	4.6	...	...
26	...	...	4.8	5.0	5.4	5.4	5.4	5.4	5.2	5.2	4.8	...	...
27	...	...	5.0	5.2	5.3	5.4	5.4	5.3	5.3	5.2	5.0	...	...
28	...	4.2	4.6	5.2	5.3	5.4	5.2	5.3	5.0	5.0	4.7	...	...
29	...	...	4.8	5.1	5.4	5.2	5.4	5.4	5.2	4.9	4.5	...	...
30	...	4.2	4.8	5.0	5.0	5.2	5.4	5.3	5.1	p4.9c	4.6	...	...
31	...	4.3	5.0	5.2	5.3	5.3	5.4	5.3	p5.2b	5.1	4.8	...	...
* MEAN	...	4.4	5.0	5.2	5.3	5.4	5.4	5.4	5.3	5.1	4.8	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...c	...c	...c	...c	200	200	200	190	200	240	...	...
2	...	250	230	p215c	200	200	210	200	200	190	230	...	...
3	...	...	240	215	200	200	210	210	200	220	210	...	...
4	...	250	240	220	210	210	200	200	200	210	230	...	...
5	...	250	240	230	230	210	210	210	210	210	240	...	...
6	...	240	240	230	220	210	210	200	200	210	230	...	...
7	...	250	230	220	210	210	220	210	215	200	230	...	...
8	...	240	240	230	220	200	210	210	190	210	220	...	...
9	...	250	240	230	220	220	210	200	220	230	240	...	...
10	...	...	240	230	230	p220c	p210b	230	220	220	250	...	...
11	...	...	240	230	p220c	210	220	220	210	220	220	...	...
12	...	...	250	240	220	210	220	220	220	220	250	...	...
13	...	250	250	220	230	220	220	210	220	230	250	...	...
14	...	250	240	230	220	200	200	210	220	230	230	...	...
15	...	250	240	p220c	210	210	200	200	200	220	240	...	...
16	...	...	240	230	230	220	220	210	220	230	250	...	...
17	...	250	250	230	220	230	220	210	210	240	230	...	...
18	...	260	250	240	230	220	220	220	220	220	240	...	...
19	...	250	250	240	240	230	230	230	240	240	260	...	...
20	...	260	240	230	220	220	210	210	210	220	250	...	...
21	...	...	250	240	230	230	210	210	220	210	240	...	...
22	...	260	250	240	230	230	240	230	230	240	250	...	...
23	...	...	250	240	230	180	220	220	230	230	240	...	...
24	...	260	250	240	220	230	210	200	210	220	250	...	...
25	...	...	240	230	220	p220c	220	220	230	230	250	...	...
26	...	...	250	240	230	230	220	220	240	240	250	...	...
27	...	...	240	230	230	220	220	210	220	230	250	...	...
28	...	250	240	240	230	230	230	220	220	240	250	...	...
29	...	...	250	230	230	210	220	210	220	250	230	...	...
30	...	280	250	240	230	220	230	230	230	p240c	240	...	...
31	...	260	240	240	230	220	220	220	p225b	230	250	...	...
* MEAN	...	253	243	231	222	215	216	213	216	224	240	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 82

AUGUST 1939 AUGUST 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	...c	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.0
2	0.7	0.8	1.2	p1.4c	1.9	2.1	2.1	2.0	1.3	1.2	0.8	0.7	1.1
3	1.1	1.1	1.2	1.1	1.4	1.9	1.8	2.0	1.9	1.3	1.2	1.0	1.1
4	1.1	0.7	1.2	1.2	1.6	1.8	1.9	1.8	1.6	1.3	1.2	0.7	1.0
5	0.8	1.1	1.1	1.7	2.0	2.0	2.0	2.1	2.0	1.3	1.2	0.7	1.0
6	1.2	1.2	1.2	1.4	1.6	2.0	2.0	2.0	2.0	1.4	1.2	0.8	1.0
7	1.1	1.0	1.2	1.2	1.2	2.0	2.1	2.1	2.1	2.0	1.4	1.2	0.8
8	1.0	0.7	1.2	1.4	1.6	1.9	1.9	2.0	1.7	1.2	0.8	0.7	0.7
9	1.0	1.2	1.2	1.2	2.0	3.9	2.1	2.0	2.0	2.0	1.2	0.8	0.8
10	1.2	0.8	1.1	1.4	2.0	p2.4	p4.0b	3.2	2.4	2.0	1.2	0.7	0.9
11	0.9	1.0	1.2	1.7	p2.0c	2.1	2.2	2.1	2.0	1.2	1.1	0.7	1.1
12	0.8	0.8	1.2	2.0	1.5	2.0	2.1	2.1	1.7	2.0	0.7	0.6	1.0
13	0.9	1.1	1.2	1.5	2.2	2.0	2.0	2.1	2.0	1.7	1.2	0.7	0.6
14	0.8	0.6	1.1	1.2	1.4	1.9	2.0	2.0	2.0	1.7	1.2	0.8	1.0
15	1.0	0.7	1.2	p1.6c	2.0	2.0	2.1	2.0	2.0	1.6	1.2	0.8	0.9
16	1.0	0.6	1.2	1.4	2.1	2.2	2.2	2.1	2.1	2.0	1.2	0.8	1.0
17	0.6	0.8	1.7	2.0	2.0	2.4	2.1	2.1	2.0	1.7	1.2	0.7	1.1
18	1.1	1.1	1.6	1.9	2.1	2.2	2.1	2.1	2.0	1.6	1.2	0.8	1.1
19	0.6	0.7	1.1	2.4	2.4	2.9	3.0	2.4	2.2	2.1	2.0	2.5	1.1
20	1.1	0.8	1.3	1.4	2.1	2.1	2.1	2.0	2.0	1.5	1.2	0.8	0.8
21	0.7	1.1	1.3	2.0	2.1	2.2	2.0	2.1	2.2	1.2	1.2	0.8	1.0
22	0.5	0.6	1.2	1.6	2.2	2.3	2.2	2.1	1.6	1.2	1.2	0.8	0.9
23	0.8	1.1	1.2	1.4	2.1	2.1	2.2	2.2	2.2	2.1	1.3	0.8	1.1
24	0.8	0.8	1.2	1.4	2.2	2.4	2.1	2.1	1.4	1.2	1.2	0.8	1.1
25	0.7	0.8	1.2	0.7	1.2	p1.8c	2.0	1.3	2.1	2.0	1.2	1.1	1.0
26	0.5	1.0	1.1	2.0	2.0	3.5	2.3	2.2	2.0	2.0	1.2	1.1	1.1
27	0.6	1.1	1.2	2.0	2.0	2.1	2.2	2.0	2.0	2.2	1.2	1.1	0.6
28	0.5	0.7	1.2	1.2	1.3	2.0	2.1	2.2	2.2	1.2	1.2	1.2	1.1
29	0.6	1.2	1.2	1.3	2.2	2.2	2.2	2.1	2.3	2.4	1.2	1.2	0.6
30	0.5	0.5	1.2	2.3	2.9	3.0	2.3	2.2	2.2	p2.2c	2.0	1.1	1.0
31	0.5	0.8	1.2	2.0	2.0	2.2	p2.2	2.3	p5.6b	2.2	1.8	1.2	1.2
MEAN*	0.8	0.9	1.2	1.6	1.9	2.2	2.2	2.1	2.1	1.6	1.2	0.9	1.0

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	...c	3.8	3.8	3.8	3.7	3.5	3.2	2.4	1.2
2	1.4	2.4	3.0	p3.4	3.7	3.9	3.9	3.8	3.6	3.4	3.0	2.3	1.4
3	1.4	2.5	3.2	3.5	3.8	3.9	4.0	3.8	3.7	3.5	3.0	2.4	1.3
4	1.2	2.4	3.1	3.5	3.6	3.8	3.8	3.8	3.7	3.4	3.0	2.3	1.3
5	1.4	2.5	3.1	3.4	3.6	3.8	3.8	3.8	3.7	3.5	3.0	2.4	1.3
6	1.4	2.5	3.3	3.5	3.7	3.8	3.9	3.8	3.7	3.5	3.1	2.4	1.3
7	1.4	2.7	3.2	3.5	3.8	3.9	4.0	3.9	3.7	3.5	3.0	2.4	1.3
8	1.5	2.6	3.2	3.5	3.8	4.0	4.0	3.9	3.7	3.5	3.0	2.4	1.3
9	1.5	2.6	3.3	3.7	3.9	4.1	4.1	3.9	3.8	3.6	3.2	2.5	1.4
10	1.6	2.6	3.2	3.6	3.9	p4.1c	p4.1b	4.2	4.0	3.6	3.2	2.5	1.5
11	1.6	2.2	3.2	3.6	p3.9c	4.0	4.1	4.0	3.8	3.5	2.9	2.5	1.4
12	1.5	2.5	3.2	3.6	3.8	4.0	4.0	4.0	3.7	3.6	3.1	2.5	1.4
13	1.4	2.5	3.2	3.6	4.0	3.9	3.9	3.9	3.8	3.5	3.2	2.5	1.2
14	1.6	2.6	3.2	3.6	3.7	3.9	4.0	3.9	3.7	3.5	3.0	2.4	1.3
15	1.5	2.6	3.0	p3.5c	3.8	4.0	3.9	3.9	3.7	3.5	3.2	2.4	1.3
16	1.6	2.6	3.2	3.6	3.8	4.0	4.0	3.9	3.7	3.5	3.0	2.4	1.3
17	1.7	2.6	3.4	3.7	3.8	4.1	4.0	3.9	3.8	3.7	3.1	2.5	1.2
18	1.6	2.7	3.4	3.6	3.9	4.0	4.0	3.9	3.7	3.5	3.1	2.5	1.4
19	1.6	2.7	3.1	3.9	4.1	4.3	4.3	4.2	3.9	3.6	3.1	2.5	1.6
20	1.6	2.6	3.1	3.6	3.8	4.0	4.0	3.8	3.8	3.5	3.0	2.5	1.3
21	1.4	2.6	3.3	3.6	3.8	3.9	3.9	3.8	3.7	3.5	3.2	2.4	1.3
22	1.5	2.5	3.2	3.6	3.8	3.9	3.9	3.8	3.6	3.4	3.0	2.4	1.3
23	1.6	2.5	3.1	3.5	3.8	3.8	4.0	3.9	3.8	3.5	3.1	2.4	1.3
24	1.6	2.6	3.2	3.5	3.8	4.0	4.0	3.9	3.7	3.4	3.0	2.4	1.2
25	1.6	2.5	3.2	3.5	3.8	p4.0c	4.1	3.9	3.8	3.6	3.1	2.4	1.3
26	1.6	2.7	3.4	3.6	3.9	4.2	4.2	4.1	3.9	3.6	3.1	2.4	1.3
27	1.6	2.6	3.0	3.6	3.9	4.0	4.2	4.1	3.8	3.6	3.2	2.4	1.3
28	1.6	2.6	3.2	3.6	3.8	4.0	4.0	4.0	3.8	3.5	3.2	2.4	1.2
29	1.6	2.7	3.4	3.6	3.9	4.1	4.1	4.0	4.2	4.0	3.1	2.5	1.3
30	1.7	2.7	3.4	3.8	4.1	4.2	4.2	4.1	4.0	p3.7c	3.1	2.4	1.4
31	1.7	2.6	3.2	3.6	3.8	4.0	4.2	4.1	p3.9b	3.7	3.1	2.4	1.3
MEAN*	1.5	2.6	3.2	3.6	3.8	4.0	4.0	3.9	3.8	3.6	3.1	2.4	1.3

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 83

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1939

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.0	6.7	5.9	5.5	4.8	4.2	5.7	8.9	10.1	11.0	10.8	10.3	10.4	10.9	10.8	10.2	10.0	10.1	10.6	9.7	p10.1f	10.6	11.0	8.4	8.9
2	8.2	8.0	6.4	5.9	5.7	5.2	5.8	9.3	10.6	10.6	9.9	10.1	9.6	9.9	10.1	10.6	10.6	10.5	9.6	8.8	9.5	10.2	9.7	8.7	8.9
3	9.0	p8.8f	8.6	7.8	7.6	7.3	8.8	11.6	12.4	12.4	11.9	10.8	11.2	11.6	11.9	11.7	11.6	11.3	10.8	9.5	p9.4f	p9.2f	9.0	9.4	10.2
4	8.9	p7.5f	6.1	5.2	4.5	4.2	5.9	9.5	11.4	12.3	12.1	12.0	12.0	11.4	10.4	10.1	9.8	9.6	9.2	7.7	p7.8f	8.0	7.8	p7.3f	8.8
5	6.8	5.8	5.3	4.4	3.5	3.0	5.5	9.2	10.6	11.3	11.5	11.8	11.9	11.9	11.8	11.5	10.8	10.5	10.6	9.5	p9.3f	p9.1f	8.8	8.4	8.9
6	p7.3f	6.2	6.5	6.4	5.4	5.0	6.3	9.4	11.3	12.1	12.2	12.0	11.6	11.0	10.6	p10.5b	10.4	10.3	8.7	7.9	7.5	9.0	8.9	p8.3f	9.0
7	p7.8f	7.2	6.0	5.9	5.5	5.4	6.2	9.4	11.1	12.3	12.3	12.5	12.6	12.3	p12.0c	p11.6c	11.2	10.5	9.0	8.4	8.2	8.5	9.0	8.0	9.3
8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	13.0	12.2	12.8	11.9	11.3	10.5	9.5	9.0	8.3	...f	...f	...f	8.6	8.0	...
9	7.5	6.3	5.5	5.6	6.2	5.2	6.1	9.6	12.1	13.0	13.4	13.4	13.8	13.7	13.3	12.0	10.3	9.9	9.3	7.8	p7.5f	p7.3f	p7.0f	6.7	9.3
10	6.1	p5.8f	p5.5f	5.2	4.9	5.0	5.9	8.5	10.5	11.2	11.6	12.5	13.3	13.8	13.0	12.3	10.3	9.6	9.4	8.7	8.1	8.2	7.8	9.0	9.0
11	8.9	8.7	7.4	6.9	6.6	7.2	8.0	10.0	11.5	12.3	12.1	11.8	11.8	11.5	10.8	10.8	10.5	10.3	10.0	8.0	7.7	7.9	9.2	p8.8f	9.5
12	8.4	8.3	6.4	5.9	5.6	5.2	7.0	10.0	11.5	12.2	11.7	11.5	11.4	12.4	12.6	12.4	12.0	11.6	10.4	9.2	p9.4f	p9.5f	9.6	p8.8f	9.7
13	7.9	7.7	6.1	5.2	4.1	3.5	5.8	8.6	10.2	10.2	10.1	10.2	10.9	12.0	12.6	13.0	13.0	13.0	12.2	9.8	9.8	9.9	11.0	10.0	9.4
14	8.9	8.4	6.5	5.6	5.2	4.5	6.5	9.6	11.6	12.5	12.2	10.9	11.0	11.7	...c	...c	...c	11.9	...c	...c	...c	...c	...c	...c	...
15	7.6c	7.4	6.0	5.6	4.8	3.8	6.1	9.3c	11.5c	12.6	12.8	12.4	11.5	11.1	10.9	10.9	10.8	11.0	10.7	9.6	10.1	11.4	11.3	9.8	9.5
16	8.2	6.6	5.5	4.7	3.6	3.3	5.9	9.3	11.0	11.2	11.7	10.5	9.8	9.7	9.8	10.3	10.5	10.8	10.6	9.4	p9.8f	p10.3f	10.9	10.7	8.9
17	p8.5f	6.2	5.5	5.7	p4.9f	6.1	8.4	10.5	11.8	12.8	13.4	12.4	9.4	9.5	9.4	9.5	9.8	9.8	10.7	11.3	10.5	9.8	9.1	8.2	9.3
18	8.3	8.4	5.9	4.9	4.5	4.1	6.9	9.6	11.3	12.0c	12.2	13.0	13.6	13.0	11.7	10.4	9.8	9.3	9.2	8.0	p8.2f	p8.4f	8.6	p8.9f	9.2
19	9.3	9.2	7.3	6.5	5.4	4.8	7.0	9.8	11.3	12.7	13.1	12.4	11.8	12.0	11.9	10.9	10.3	9.9	9.6	8.8	8.4	9.2	9.5	10.0	9.6
20	9.1	7.8	7.2	6.5	6.7	6.7	8.3	11.5	13.3	14.2	13.4	12.0	11.9	12.0	12.2	11.3	10.5	10.2	9.8	8.3	7.7	p8.1f	8.5	8.6	9.8
21	8.1	7.3	6.0	5.6	5.3	4.5	6.7	10.0	11.9	13.6	13.6	13.6	13.1	12.0	11.9	11.4	10.8	10.4	9.8	8.3	p9.0f	9.7	p9.3f	p8.9f	9.6
22	p8.5f	8.1	7.1	6.4	5.2	4.5	7.1	10.4	12.2	12.9	12.4	11.7	11.5	11.4	11.5	11.1	10.6	10.0	9.4	8.0	7.3	7.2	8.0	7.7	9.2
23	6.7	7.7	6.6	5.8	4.8	4.9	7.4	10.3	12.2	13.9	13.9	13.8	13.6	13.2	12.3	11.5	10.6	10.0	9.6	8.1	p7.8f	p7.5f	p7.8f	8.1	9.5
24	8.2	8.0	7.2	6.2	5.5	5.2	7.7	10.8	12.8	13.6	14.1	13.4	13.2	12.7	12.5	12.2	11.2	10.7	10.0	8.5	8.3	8.7	8.2	8.5	9.9
25	8.3	8.3	7.5	6.4	5.0	4.6	7.4	10.6	12.4	12.8	12.1	10.6	10.1	10.4	11.0	11.2	11.2	10.0	8.9	8.7	8.2	7.7	8.4	8.4	9.2
26	8.5	8.7	8.8	8.6	8.3	9.2	10.0	12.7	13.4	13.9	13.3	13.1	11.9	11.5	11.2	11.3	11.8	12.0	11.5	9.3	9.0	p9.1f	9.3	9.2	10.6
27	8.5	8.4	8.3	7.4	6.6	5.5	7.7	11.4	12.8	13.8	13.0	11.9	11.0	10.6	10.7	10.8	10.7	10.9	10.4	8.4	p8.1f	p7.9f	7.6	7.9	9.6
28	7.7	6.6	6.6	5.6	4.8	4.7	7.6	10.6	12.5	13.6	13.8	13.4	12.6	12.0	11.9	11.8	11.7	11.6	11.7	9.1	p8.7f	p8.3f	p8.0f	7.7	9.7
29	p7.6f	7.5	6.8	5.5	5.4	4.2	7.4	10.7	12.6	14.0	13.7	13.4	11.4	10.9	11.0	10.7	10.5	10.4	10.2	8.3	8.4	8.4	8.4	8.5	9.4
30	8.4	6.8	6.6	6.1	6.1	5.2	7.8	11.3	13.4	13.7	13.5	12.8	11.0	10.8	10.4	10.4	10.6	11.1	11.3	9.9	9.5	10.0	p9.7f	9.4	9.8
31																									
MEAN*	8.1	7.5	6.6	6.0	5.4	5.0	7.0	10.1	11.8	12.6	12.5	12.1	11.7	11.6	11.4	11.1	10.7	10.5	10.0	8.8	8.7	8.9	9.0	8.6	9.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 84

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1939 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS SEPTEMBER 1939

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	240	230	230	250	250	250	270	260	270	300	310	330	310	380	350	330	300	280	310	360	250	250	230	240	282
2	240	230	250	250	260	250	280	280	290	300	360	350	370	370	350	300	290	260	320	350	270	220	250	260	290
3	270	270	290	300	280	250	270	260	230	300	320	310	330	350	330	310	330	280	330	380	380	240	240	230	297
4	250	260	260	260	270	260	290	250	280	290	310	320	330	340	330	280	300	280	330	400	300	310	220	230	290
5	200	230	250	240	260	260	290	280	300	290	320	310	320	320	310	320	300	230	320	350	350	270	220	240	285
6	240	260	250	260	250	250	300	290	300	300	320	330	310	330	330	q320b	320	300	340	430	410	280	250	240	300
7	250	230	260	250	240	240	290	270	270	300	310	320	310	320	310	q310c	300	290	330	380	340	290	260	240	288
8	...	...	...	...	...	...	...	...	...	...	310	310	450	310	330	300	300	280	340	420	410	360	220	230	...
9	230	220	270	240	310	330	290	270	280	280	300	300	300	320	310	300	320	270	330	440	410	320	230	230	296
10	250	230	230	270	270	290	290	290	300	280	290	290	290	300	300	300	300	270	330	380	370	310	260	230	283
11	230	230	260	260	280	250	290	290	290	300	310	300	310	310	300	300	280	280	330	450	380	260	230	240	290
12	230	240	250	250	250	250	290	280	280	290	290	310	300	300	290	280	280	270	320	410	350	310	230	230	282
13	230	240	240	250	250	250	290	250	310	310	320	330	320	320	280	300	280	270	320	370	310	240	220	210	280
14	230	240	260	270	260	250	280	280	230	300	330	310	310	330	q320c	q310c	q300c	280	320	370	400	330	270	260	295
15	330	250	250	250	260	270	280	260	q280c	300	300	320	320	320	310	310	330	280	330	380	230	240	220	230	285
16	230	230	240	260	260	260	280	270	270	280	320	340	380	380	330	320	280	280	320	370	320	270	230	230	290
17	210	240	290	270	300	280	280	270	270	270	280	320	340	380	380	330	320	280	230	370	320	270	230	230	292
18	210	240	290	270	300	270	280	270	280	q290c	300	300	320	320	310	300	310	260	320	400	390	390	290	220	297
19	230	220	240	250	250	240	260	280	300	300	300	330	320	310	300	300	300	280	320	330	340	260	250	220	282
20	230	230	260	340	340	280	270	270	270	280	320	310	330	330	320	300	280	280	320	420	390	330	250	220	299
21	230	250	260	250	250	250	260	250	280	280	280	300	300	300	300	280	300	280	330	440	400	270	240	230	284
22	230	240	240	250	260	250	270	270	280	300	300	290	310	300	300	300	290	230	320	440	490	320	270	240	293
23	230	230	230	250	270	270	280	250	270	280	290	310	300	310	300	300	280	250	320	450	420	330	220	230	286
24	220	240	240	260	230	260	230	230	270	230	300	300	300	300	300	300	290	280	330	[illegible]	350	400	260	250	291
25	230	230	240	250	270	260	270	250	280	290	300	310	300	300	290	290	310	280	330	390	460	320	250	270	290
26	220	240	250	280	290	260	270	260	270	280	290	[illegible]	310	280	290	280	290	280	330	400	400	400	240	250	290
27	230	250	240	240	250	250	270	260	280	290	290	290	300	300	310	300b	290	270	330	510	500	360	350	220	299
28	240	250	230	250	260	250	230	260	290	290	300	300	310	300	300	300	280	270	320	[illegible]	390	360	230	230	293
29	230	240	250	250	250	240	260	270	270	[illegible]	300	300	300	300	300	290	290	270	330	450	380	370	270	220	288
30	220	230	240	250	250	240	270	260	270	270	300	310	320	310	300	300	290	230	340	460	410	340	280	250	291
31																									
MEAN*	235	239	252	259	268	259	279	268	282	289	306	312	321	321	313	302	298	276	325	410	371	307	247	235	291

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 85

SEPTEMBER 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1939

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.8	5.4	5.3	5.3	5.2	5.6	5.3	5.2	4.4	...	...
2	...	4.8	5.1	5.2	5.4	5.4	5.5	5.4	5.3	4.8	4.3	...	...
3	...	...	5.0	5.1	5.4	5.4	5.4	5.6	5.4	5.1	5.0	...	...
4	...	...	4.8	5.2	5.3	5.4	5.4	5.4	5.4	4.6	4.6	...	...
5	...	4.7	5.0	5.1	5.3	5.4	5.4	5.3	5.2	5.0	4.5	...	...
6	...	...	4.8	5.2	5.4	5.5	5.5	5.5	5.2	p5.0b	4.8	...	...
7	...	...	4.8	5.2	5.3	5.4	5.4	5.4	5.3	p5.0c	4.5	...	...
8	...	...	q4.8c	q5.2c	5.4	5.4	6.6	6.3	5.4	4.8	4.3	...	...
9	...	4.3	5.2	5.1	5.2	5.3	5.4	5.4	5.3	5.0	4.9	...	...
10	...	4.8	5.0	5.2	5.4	5.3	5.4	5.3	5.2	5.0	4.7	...	...
11	...	4.7	5.1	5.3	5.4	5.5	5.5	5.3	5.3	5.0	4.8	...	...
12	...	4.3	4.8	5.1	5.3	5.4	5.3	5.4	5.0	4.8	4.3	...	...
13	...	4.1	5.0	5.3	5.5	5.6	5.4	5.3	5.0	4.9	4.3	...	...
14	...	4.6	4.8	5.2	5.3	5.1	5.2	5.3	5.1	4.9	4.4	...	...
15	...	...	4.8	5.3	5.4	5.4	5.5	5.4	5.3	5.0	5.0	...	...
16	...	4.3	4.9	5.2	5.4	5.4	5.6	5.5	5.2	5.1	4.3	...	...
17	...	4.4	4.8	5.0	5.3	5.5	5.5	5.4	5.1	4.8	4.5	...	...
18	...	...	5.0	5.2c	5.4	5.4	5.5	5.4	5.1	4.9	4.8	...	...
19	...	4.3	5.1	5.4	5.4	5.5	5.5	5.2	5.1	4.8	4.5	...	...
20	...	4.8	4.8	4.9	5.3	5.4	5.5	5.4	5.3	5.0	4.3	...	...
21	...	...	4.8	5.0	5.3	5.6	5.5	5.4	5.2	4.9	4.7	...	...
22	...	4.6	4.8	5.3	5.4	5.3	5.5	5.4	5.3	5.0	4.6	...	...
23	...	...	4.8	5.2	5.4	5.6	5.6	5.5	5.4	5.0	4.7	...	...
24	...	...	4.9	4.8	5.3	5.6	5.6	5.6	5.5	5.4	4.7	...	...
25	...	...	5.0	5.3	5.4	5.4	5.4	5.4	5.1	4.9	4.9	...	...
26	...	...	4.8	5.3	5.5	5.5	5.5	5.1	5.3	4.8	4.3	...	...
27	...	...	5.0	5.3	5.3	5.4	5.4	5.3	5.4	4.9	4.7	...	...
28	...	...	5.2	5.5	5.4	5.5	5.6	5.4	5.4	5.0	4.7	...	...
29	...	4.7	4.9	5.4	5.6	5.6	5.6	5.6	5.4	5.1	4.7	...	...
30	...	...	4.8	5.2	5.6	5.6	5.8	5.6	5.4	5.2	4.6	...	...
31													
* MEAN	...	4.5	4.9	5.2	5.4	5.4	5.5	5.4	5.3	5.0	4.6	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	240	230	220	210	210	200	220	230	250	...	...
2	...	260	250	240	240	230	220	220	210	230	250	...	...
3	...	...	240	240	240	230	210	220	240	240	260	...	...
4	...	...	240	230	230	220	210	220	230	220	260	...	...
5	...	260	240	240	240	230	p230b	230	250	240	250	...	...
6	...	...	270	240	p240b	250	230	240	240	p250b	280	...	...
7	...	...	...	250	250	p240b	p230b	p230b	230	p240c	280	...	...
8	...	...	q260	q250	250	240	230	230	220	240	250	...	...
9	...	250	250	240	230	220	220	230	220	230	250	...	...
10	...	250	240	240	230	220	220	220	220	230	250	...	...
11	...	260	250	240	240b	240	240	220	230	230	230	...	...
12	...	250	240	240	230	220	220	220	230	230	250	...	...
13	...	280	250	240	230	220	220	220	210	210	250	...	...
14	...	260	250	230	230	220	220	220	230	240	260	...	...
15	...	...	250c	240	240	230	220	210	220	230	250	...	...
16	...	250	240	230	230	220	220	220	220	220	220	...	...
17	...	250	240	230	230	220	220	220	220	230	230	...	...
18	...	...	240	230c	230	220	220	230	220	220	210	...	...
19	...	250	240	240	230	230	220	220	220	230	240	...	...
20	...	250	250	240	230	230	210	230	220	220	240	...	...
21	...	...	260	250	230	230	230	230	220	220	240	...	...
22	...	250	240	230	230	230	230	220	230	230	250	...	...
23	...	...	240	230	220	220	220	210	210	210	210	...	...
24	...	...	250	240	240	230	220	220	220	220	230	...	...
25	...	...	240	230	230	220	230	220	220	230	270	...	...
26	...	...	250	230	220	230	220	210	210	230	260	...	...
27	...	...	250	240	230	220	220	220	230	240b	260	...	...
28	...	...	250	240	230	210	210	210	210	240	240	...	...
29	...	250	250	230	220	220	220	210	220	220	240	...	...
30	...	...	240	230	230	200	200	210	220	210	240	...	...
31													
* MEAN	...	255	247	237	232	225	221	220	223	229	247	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1939

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.1	1.2	2.1	2.2	2.2	2.2	2.3	2.1	2.1	2.1	1.8	1.1	1.0
2	1.1	1.1	1.2	2.0	2.3	2.2	2.3	2.2	2.1	1.8	1.2	0.8	1.1
3	0.7	1.1	2.0	2.0	2.2	p2.2b	2.3	2.4	2.2	2.2	2.2	1.2	1.0
4	0.5	1.0	1.2	2.2	2.1	2.1	2.3	2.5	2.2	2.2	1.8	0.7	1.0
5	0.5	1.1	1.9	2.2	2.4	2.2	2.9	2.5	2.9	2.3	1.3	1.3	1.0
6	0.9	p4.0	2.1	2.3	p2.3b	3.5	2.9	3.0	2.3	p2.2b	2.2	1.2	0.7
7	1.0	1.8	2.3	2.3	3.6	p2.2b	p2.3b	p2.3b	2.3	p2.2c	2.2	1.3	1.1
8	...c	...c	...c	...c	...c	2.2	2.3	2.3	2.2	2.1	1.2	1.0	0.9
9	0.6	1.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.2	0.8	1.0
10	0.5	0.8	1.1	2.0	2.1	2.2	2.3	2.2	2.1	1.3	1.2	1.3	0.9
11	0.5	1.1	2.1	2.1	p2.2b	3.6	p2.3b	2.3	2.3	2.0	1.3	0.7	1.0
12	1.0	0.8	1.3	2.0	2.2	2.2	2.2	2.2	2.3	2.2	1.1	0.8	1.0
13	0.6	0.6	1.2	2.0	2.0	2.4	2.5	2.2	2.1	2.1	1.3	0.8	1.1
14	0.5	1.2	1.8	2.1	2.1	2.2	2.2	2.2	2.1	2.0	2.3	1.3	1.1
15	...c	...c	...c	2.1	2.1	2.3	3.0	2.3	2.1	1.8	1.2	0.6	0.8
16	1.0	0.8	1.1	2.1	p2.1b	2.2	2.3	2.1	2.2	2.0	1.2	1.2	1.0
17	0.9	1.0	2.2	2.2	2.2	2.4	2.2	2.1	2.1	1.8	1.2	0.7	0.7
18	1.0	1.1	2.2	2.2c	2.2	2.3	2.2	2.2	2.1	1.4	1.2	0.8	1.0
19	1.0	1.1	1.3	2.0	2.1	2.1	2.1	2.3	2.2	1.4	1.2	1.1	1.0
20	0.5	1.1	1.3	2.0	2.1	2.3	2.2	2.1	2.0	2.0	1.2	0.8	0.6
21	1.0	2.2	3.0	3.8	3.9	3.9	2.4	2.3	2.1	2.1	1.3	1.2	1.0
22	1.0	1.3	2.0	2.2	3.9	4.0	3.1	2.4	2.2	2.2	1.4	0.8	1.0
23	1.0	1.2	1.4	2.0	2.2	3.0	2.2	2.2	2.2	2.1	1.3	1.2	1.0
24	0.8	1.2	2.0	2.1	2.2	2.0	2.3	2.3	2.2	2.1	1.3	1.2	1.0
25	1.0	2.0	2.0	2.2	2.2	2.3	2.3	2.4	2.3	3.0	1.4	0.8	0.7
26	0.8	1.2	2.0	2.2	2.3	2.3	2.4	2.3	2.3	2.2	2.2	1.1	1.0
27	1.0	2.1	2.3	2.4	2.3	3.0	3.1	2.4	p2.3b	2.2b	2.0	0.8	1.0
28	1.0	1.3	2.0	2.2	2.3	3.1	3.7	2.3	2.2	2.4	1.4	1.2	1.0
29	1.1	1.2	1.4	2.2	2.3	3.8	2.3	2.2	2.1	2.0	2.0	0.8	1.1
30	1.0	2.1	2.3	2.3	2.8	2.8	3.4	.9	2.3	2.1	1.2	1.1	1.0
31													
* MEAN	0.8	1.3	1.8	2.2	2.4	2.6	2.5	2.3	2.2	2.0	1.5	1.0	1.0

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.7	2.7	3.2	3.7	4.0	4.1	4.1	4.0	3.9	3.5	3.1	2.4	1.4
2	1.7	2.7	3.4	3.7	4.1	4.1	4.1	4.1	3.9	3.6	3.1	2.4	1.3
3	1.7	2.7	3.4	3.7	3.9	p4.1b	4.2	4.2	3.9	3.6	3.4	2.5	1.4
4	1.8	2.8	3.5	3.8	4.2	4.3	4.3	4.2	4.0	3.7	3.4	2.5	1.4
5	1.9	2.8	3.5	3.9	4.2	4.3	4.3	4.3	4.1	3.9	3.3	2.6	1.4
6	1.9	p2.8f	3.6	4.0	p4.3b	4.6	4.2	4.2	4.2	p3.9b	3.7	2.6	1.3
7	1.9	2.9	3.6	4.2	4.4	p4.5b	p4.6b	p4.4b	4.1	p3.9c	3.6	2.6	1.3
8	...	...	...	...	3.9	4.3	4.3	4.1	4.0	3.7	3.1	2.4	1.4
9	1.8	2.8	3.5	3.7	4.2	4.2	4.2	4.1	4.0	3.6	3.1	2.4	1.3
10	1.9	2.8	3.3	3.8	4.0	4.2	4.2	4.1	4.0	3.6	3.1	2.4	1.4
11	1.8	2.4	3.5	3.8	p4.0b	4.3	p4.3b	4.1	3.9	3.6	3.1	2.5	1.3
12	1.9	2.8	3.4	3.8	4.0	4.1	4.2	4.1	4.0	3.5	3.0	2.4	1.4
13	1.9	2.7	3.4	3.8	4.0	4.2	4.2	4.2	3.9	3.6	3.1	2.4	1.4
14	1.8	2.9	3.4	3.8	4.0	4.1	4.2	4.1	4.0	3.6	3.3	2.4	1.3
15	...c	...c	...c	3.8	4.0	4.2	4.3	4.1	4.0	3.7	3.1	2.5	1.2
16	1.8	2.5	3.4	3.8	4.3	4.2	4.1	4.1	3.8	3.5	3.1	2.4	1.2
17	1.9	2.8	3.5	3.8	4.0	4.2	4.2	4.0	3.8	3.5	3.1	2.3	1.2
18	1.9	2.8	3.5	p3.8c	4.0	4.2	4.2	3.9	3.6	3.0	2.4	1.4	0.6
19	1.9	2.9	3.5	3.9	4.0	4.1	4.1	4.1	4.0	3.6	3.0	2.4	1.2
20	1.9	2.7	3.4	3.8	4.0	4.1	4.1	4.1	3.9	3.6	3.0	2.4	1.3
21	2.0	3.1	3.8	4.0	4.1	4.4	4.2	4.0	4.0	3.6	3.1	2.5	1.4
22	2.1	2.9	3.6	3.9	4.2	4.3	4.3	4.3	4.1	3.8	3.2	2.4	1.4
23	2.0	2.8	3.6	3.9	4.1	4.3	4.3	4.2	4.0	3.7	3.1	2.5	1.4
24	2.0	3.0	3.7	4.0	4.2	4.3	4.3	4.2	4.1	3.8	3.1	2.5	1.3
25	2.0	3.0	3.5	3.9	4.2	4.2	4.2	4.2	4.1	4.0	3.3	2.5	1.3
26	2.0	2.9	3.5	3.9	4.2	4.2	4.4	4.3	4.2	3.8	3.3	2.5	1.2
27	2.1	3.0	3.8	4.1	4.3	4.5	4.5	4.3	4.3	p3.9b	3.6	2.5	1.3
28	2.2	3.1	3.6	3.9	4.2	4.3	4.4	4.2	4.0	3.7	3.2	2.5	1.3
29	2.2	3.0	3.7	3.9	4.2	4.3	4.3	4.2	4.0	3.7	3.2	2.5	1.3
30	2.2	3.0	3.6	4.0	4.3	4.3	4.4	4.2	4.1	3.7	3.2	2.5	1.4
31													
* MEAN	1.9	2.8	3.5	3.9	4.1	4.2	4.3	4.2	4.0	3.7	3.2	2.4	1.3

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f°F2 EQUAL TO OR LESS THAN f°F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 87

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1939 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND OCTOBER 1939

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	9.3	7.7	6.5	6.4	6.1	5.6	8.4	11.4	12.5	14.2	13.8	13.8	12.4	10.9	10.6	10.7	10.7	11.0	11.4	10.5	9.6	10.2	10.9	10.2	10.2
2	10.0	9.2	8.8	8.0	5.2	3.8	7.3	10.6	12.7	13.8	12.6	11.0	10.2	9.9	10.0	10.2	10.7	11.3	11.5	10.7	9.3	8.5	9.1	9.2	9.7
3	9.7	8.6	7.6	6.0	4.6	3.1	7.2	10.4	11.9	13.4	14.4	14.2	13.5	10.1	10.5	11.0	11.9	12.5	12.5	13.2	13.0	13.4	12.6	13.0	10.8
4	11.4	10.0	9.7	9.8	10.2	9.7	11.3	13.8	14.4	14.6	14.0	14.3	14.1	13.9	13.0	12.1	11.9	11.9	11.8	10.1	p9.1f	8.1	10.0	9.9	11.6
5	10.3	8.6	7.3	7.1	6.8	5.5	8.2	11.6	13.5	14.0	13.8	12.6	11.8	11.0	10.6	10.3	10.7	11.4	12.0	11.5	10.9	10.4	p10.8f	11.2	10.5
6	10.3	8.1	7.4	7.7	p6.6f	5.6	7.2	11.8	13.2	14.0	14.1	13.2	12.3	12.0	12.2	12.1	12.2	12.0	11.9	11.3	11.6	10.4	10.4	10.3	10.7
7	11.1	9.7	9.5	9.9	9.6	8.2	9.0	11.6	13.2	13.7	13.8	11.0	10.3	10.5	10.6	10.6	10.5	11.4	11.6	11.1	11.0	11.5	11.7	11.1	10.9
8	10.5	8.6	7.5	7.0	6.8	5.8	7.9	11.0	12.8	13.8	13.2	13.0	11.9	11.4	11.1	11.1	11.2	11.4	11.3	10.1	9.1	9.3	9.3	9.2	10.2
9	8.5	7.6	7.2	5.0	p3.7f	2.4	6.2	9.6	12.2	13.2	13.2	13.4	...c	...c	...c	...c	...c	...c	10.4	10.5	9.8	10.0	10.5	10.3	...
10	9.6	7.6	6.5	6.1	5.9	5.6	8.3	10.8	12.5	11.8	11.1	11.2	11.5	10.8	11.2	11.3	11.3	11.3	10.9	9.4	p9.3f	p9.2f	9.2	9.3	9.7
11	9.0	9.2	6.5	6.5	6.3	6.1	8.5	11.1	12.9	13.3	13.7	13.1	13.0	13.2	13.0	12.8	12.6	12.0	10.7	9.0	10.1	12.2	12.5	11.9	10.8
12	9.8	6.7	5.7	4.3	3.7	3.2	7.1	10.3	12.0	12.4	11.8	11.0	11.0	11.2	11.6	12.0	12.3	12.3	11.7	9.7	...f	...f	...f	...f	...
13	10.2	8.5	7.3	p5.7f	p4.1f	2.4	7.1	9.9	11.3	11.8	10.9	10.8	10.5	10.6	10.6	11.7	11.6	12.5	12.0	10.8	13.6	11.7	10.0	8.2	9.7
14	6.9	6.9	p6.8f	p6.7f	6.7	7.8	8.8	12.0	14.2	14.2	14.1	11.9	11.4	11.2	11.9	12.7	13.5	13.6	13.3	12.5	11.3	p11.0f	p10.7f	p10.5f	10.9
15	10.3	...f	...f	...f	...f	...f	11.4	13.2	14.5	14.0	14.0	11.6	10.7	10.3	10.3	11.1	11.8	12.3	12.7	11.8	11.2	10.0	9.7	p9.3f	...
16	8.9	8.3	7.9	7.2	6.2	5.3	8.1	10.7	12.8	12.7	10.4	9.5	9.8	10.3	11.2	11.7	12.0	12.6	12.6	12.4	12.0	12.9	12.8	11.6	10.4
17	10.5	8.0	6.0	5.4	5.5	5.5	8.5	11.9	13.8	14.2	13.9	11.3	10.3	10.4	10.1	10.8	11.7	12.2	13.0	13.0	12.6	13.2	13.6	13.2	10.8
18	12.2	9.6	7.8	7.4	7.1	6.9	9.6	12.3	14.1	14.1	14.4	14.3	12.1	11.7	11.7	11.9	12.2	12.4	12.6	12.7	10.2	9.9	10.0	10.5	11.2
19	9.8	8.1	7.8	7.3	7.2	5.6	8.6	11.3	13.2	13.4	13.0	11.4	11.5	11.7	11.4	11.0	11.0	11.2	11.2	11.2	10.9	10.0	10.3	11.9	10.4
20	12.5	10.4	8.0	7.7	7.0	6.2	9.0	12.2	13.6	14.0	13.4	12.8	12.2	12.2	11.9	11.9	12.0	11.8	11.6	10.8	9.6	9.3	11.0	p10.3f	10.9
21	9.6	8.2	7.5	6.8	5.8	4.7	8.4	11.7	13.4	13.6	13.2	13.4	13.6	12.9	12.4	11.9	12.0	12.0	11.2	10.7	11.3	11.7	9.7	8.7	10.6
22	8.8	8.0	6.9	6.7	6.2	5.9	9.1	12.4	14.0	14.9	14.0	13.2	13.1	12.4	13.0	12.9	12.7	12.7	12.3	11.7	11.5	11.4	10.2	p10.9f	11.0
23	11.7	9.3	7.7	5.2	3.3	3.2	8.3	11.8	12.9	13.6	13.3	13.2	13.2	13.4	13.4	12.0	11.9	12.0	11.9	10.5	9.9	8.7	p8.6f	p8.5f	10.3
24	p8.4f	8.4	7.7	7.6	7.5	6.7	9.7	12.7	13.9	14.1	14.0	13.7	13.8	13.7	13.4	13.5	13.3	12.6	11.5	9.4	7.7	8.0	8.4	p8.2f	10.7
25	p8.0f	p7.7f	7.4	p6.8f	6.2	5.9	9.1	12.0	13.6	13.6	12.4	12.0	13.0	13.2	13.3	13.4	13.6	13.0	13.0	10.4	11.2	9.3	11.4	p10.5f	10.8
26	p9.6f	8.7	8.8	7.3	4.9	4.3	8.6	11.8	12.6	12.8	11.9	11.8	12.0	12.5	12.7	12.8	12.4	12.0	12.2	9.4	8.5	9.1	9.4	10.1	10.3
27	10.4	8.9	8.3	6.6	4.8	3.6	8.2	11.0	12.9	13.1	11.9	11.3	11.7	12.2	12.7	13.4	13.6	13.4	12.7	11.0	8.9	8.8	8.9	p8.8f	10.3
28	p8.8f	8.7	6.4	5.6	5.6	5.5	8.8	12.0	13.6	13.1	11.9	14.1	13.8	12.0	10.6	11.3	11.6	12.0	12.0	12.2	12.0	12.1	11.9	11.5	10.7
29	11.2	10.1	9.5	8.5	7.9	6.9	9.7	12.0	13.4	13.6	13.0	12.3	12.2	12.3	12.2	12.2	12.6	12.8	12.8	11.6	9.7	10.4	p9.9f	p9.4f	11.1
30	8.8	8.3	8.0	8.0	7.2	5.7	9.2	11.8	13.4	13.9	13.8	13.3	13.2	12.0	11.4	11.1	11.4	11.7	11.9	10.9	10.0	9.3	8.8	8.8	10.5
31	8.6	7.6	7.2	6.6	5.7	5.2	8.8	11.1	12.7	13.8	13.9	13.6	12.9	12.1	12.0	12.5	12.4	12.4	12.0	11.2	10.3	10.2	10.6	11.5	10.6
* MEAN	9.8	8.5	7.6	6.9	6.2	5.4	8.6	11.5	13.2	13.6	13.1	12.5	12.1	11.7	11.7	11.8	12.0	12.1	11.9	11.0	10.5	10.3	10.4	10.3	10.5

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 88

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1939 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — OCTOBER 1939

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	240	280	290	260	250	250	250	270	280	290	260	290	280	240	300	290	280	320	440	390	300	230	210	282
2	260	200	250	230	240	240	270	270	270	270	280	270	300	300	290	290	280	270	330	470	430	360	320	240	289
3	230	230	220	230	230	240	270	260	280	270	280	280	300	330	290	260	270	280	310	300	290	280	290	330	274
4	330	320	330	330	310	280	270	270	270	270	270	280	290	290	300	300	300	280	330	430	390	280	250	230	300
5	230	230	250	260	250	250	280	260	280	270	250	290	300	300	290	280	290	280	330	330	330	360	280	240	281
6	250	250	320	430	390	360	280	260	260	210	290	290	290	290	280	290	250	270	310	420	380	250	250	250	301
7	240	260	270	250	230	230	270	270	270	290	290	320	300	320	300	320	310	270	320	400	310	250	220	230	281
8	240	240	250	240	240	230	270	250	290	300	300	320	330	300	320	300	320	270	300	400	410	320	250	240	289
9	240	280	230	240	550	400	270	250	290	280	290	330	...c	...c	...c	...c	...c	...c	300	340	330	270	230	220	...
10	230	250	260	250	260	270	280	250	300	290	300	310	310	300	290	290	270	260	310	420	410	300	240	230	287
11	230	250	270	250	250	240	270	250	280	300	320	310	310	300	320	300	300	260	320	400	330	240	230	220	281
12	220	230	240	240	250	270	270	250	310	290	310	300	300	320	320	320	280	260	310	400	360	260	260	240	284
13	220	230	230	360	470	390	270	250	300	300	310	330	330	290	270	260	260	280	330	300	220	220	240	250	288
14	280	420	360	340	320	330	270	250	260	300	300	310	350	290	280	260	260	260	280	330	430	430	330	290	312
15	280	300	330	330	280	250	260	250	280	280	230	310	320	300	290	280	280	260	280	350	380	360	290	300	297
16	270	250	230	240	250	230	250	250	270	230	310	330	340	310	290	310	290	260	300	360	300	240	240	230	277
17	220	220	270	340	300	280	270	250	270	290	320	310	310	310	290	290	260	280	300	350	310	270	250	240	284
18	220	230	260	300	390	260	270	250	270	290	300	300	310	300	300	290	230	270	300	380	370	350	300	270	290
19	230	240	260	250	240	230	260	260	280	290	300	290	300	300	290	260	270	280	290	330	380	380	280	230	280
20	220	230	250	250	240	250	260	250	260	280	290	290	280	260	280	260	290	270	310	410	460	400	330	260	288
21	220	250	250	250	250	270	270	260	280	250	280	280	290	290	290	290	270	270	310	350	290	320	330	270	280
22	250	250	270	270	260	260	270	260	270	290	280	290	300	290	280	290	260	280	310	440	430	330	320	270	292
23	250	220	210	230	250	280	260	250	280	290	230	300	300	300	310	290	270	270	320	420	390	350	350	300	291
24	240	260	270	270	250	260	270	250	270	270	280	280	290	300	300	280	270	270	320	450	490	460	310	260	299
25	250	260	240	260	250	250	270	250	280	290	290	290	300	290	270	290	300	270	330	490	440	350	360	280	298
26	240	240	250	250	250	270	270	260	290	290	300	310	290	300	280	250	250	270	320	450	410	370	300	260	290
27	230	240	230	240	230	250	260	250	280	300	300	300	320	300	290	290	270	270	315	450	470	420	380	320	300
28	240	250	240	250	260	250	200	250	260	280	280	290	300	300	260	310	200	270	310	390	370	320	280	300	281
29	280	270	250	250	240	240	250	250	290	280	290	300	300	300	290	280	280	270	300	420	400	400	360	270	294
30	260	270	260	240	240	250	260	250	270	290	300	300	310	300	300	300	280	270	300	370	380	400	330	270	292
31	240	250	240	240	230	260	260	240	260	280	280	290	300	300	270	270	270	270	300	370	360	370	310	270	280
MEAN*	244	252	260	271	277	269	267	254	279	285	293	299	304	299	291	288	277	271	310	392	376	329	289	259	289

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 89

OCTOBER 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1939

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION													MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	5.1	5.3	5.4	5.4	5.4	5.1	5.1	5.1	4.5	...	...	...	...	250	230	220	210	200	200	210	230	260	...	...
2	...	4.7	4.9	5.1	5.4	5.3	5.6	5.4	5.3	5.0	4.4	...	...	...	240	240	230	210	210	210	210	220	240	240	...	...
3	...	...	5.2	4.9	5.2	5.4	5.4	5.5	5.4	5.0	4.3	...	...	...	...	240	240	230	230	210	210	220	230	260	...	...
4	...	5.0	5.0	5.2	5.2	5.4	5.5	5.4	5.4	5.2	5.0	...	...	...	250	240	230	230	240	240	220	230	230	240	...	...
5	...	...	5.1	5.2	5.4	5.6	5.6	5.5	5.2	4.9	4.7	...	...	...	...	250	240	230	250	230	210	210	220	240	...	...
6	...	4.6	4.8	4.9	5.3	5.4	5.4	5.4	5.2	5.0	4.3	...	...	...	240	250	230	220	220	230	220	230	230	250	...	...
7	...	4.7	4.8	5.2	5.2	5.5	5.3	5.3	5.1	5.2	4.7	...	...	...	250	240	230	230	230	210	210	210	220	250	...	...
8	...	...	5.2	5.2	5.4	5.6	5.6	5.1	5.3	5.2	5.0	...	...	...	...	240	230	230	210	200	200	230	240	250	...	...
9	...	...	5.0	5.2	5.2	5.6	...c	...c	...c	...c	...c	...	...	...	...	240	220	200	220	...c	...c	...c	...c	...c	...	...
10	...	...	5.0	5.1	5.5	5.5	5.5	5.3	5.3	5.2	4.4	...	...	...	...	230	230	220	200	220	210	200	210	230	...	...
11	...	...	5.1	5.3	5.5	5.5	5.5	5.5	5.5	5.0	5.1	...	...	...	...	240	230	220	210	210	210	210	220	230	...	...
12	...	...	5.2	5.3	5.3	5.5	5.5	6.1	6.0	5.1	4.4	...	...	...	...	240	230	220	210	210	200	230	200	250	...	...
13	...	...	5.2	5.2	5.4	5.6	5.6	4.8	4.4	4.3	p4.2	...	...	...	...	230	240	220	220	200	210	210	240	p250	...	...
14	...	...	4.4	5.3	5.5	5.5	5.6	5.5	5.1	4.3	4.2	...	...	...	...	250	240	220	230	210	210	210	220	230	...	...
15	...	...	5.2	5.3	5.3	5.5	5.6	5.6	5.5	5.3	5.0	...	...	...	...	230	230	230	210	210	220	210	210	250	...	...
16	...	...	5.0	5.3	5.5	5.6	5.6	5.5	5.3	5.3	4.8	...	...	...	...	240	230	230	220	230	210	230	220	250	...	...
17	...	...	5.2	5.3	5.5	5.5	5.5	5.5	5.1	5.2	4.4	...	...	...	...	240	240	230	220	220	220	230	230	260	...	...
18	...	...	5.1	5.5	5.5	5.5	5.5	5.4	5.3	5.0	4.4	...	...	...	...	240	230	220	230	220	220	260	240	250	...	...
19	...	...	5.1	5.4	5.5	5.5	5.4	5.4	5.3	4.4	4.2	...	...	...	...	260	240	240	220	220	210	230	240	240	...	...
20	...	...	5.2	5.5	5.5	5.5	5.4	5.4	5.3	5.2	5.2	...	...	...	...	250	250	220	220	220	210	200	220	250	...	...
21	...	...	5.1	5.4	5.5	5.3	5.5	5.5	5.3	5.2	4.3	...	...	...	...	250	230	230	220	220	220	210	220	220	...	...
22	...	...	5.1	5.5	5.4	5.5	5.5	5.3	5.2	5.0	4.2	...	...	...	...	240	240	230	210	210	210	220	220	260	...	...
23	...	...	5.0	5.3	5.1	5.5	5.5	5.5	5.5	5.0	4.4	...	...	...	...	240	230	220	210	220	210	230	240	240	...	...
24	...	...	5.2	5.2	5.3	5.4	5.5	5.6	5.5	5.3	4.3	...	...	...	...	240	240	230	230	230	220	230	230	250	...	...
25	...	...	5.1	5.4	5.5	5.5	5.5	5.5	5.2	5.2	4.9	...	...	...	...	240	230	230	220	215	220	220	230	240	...	...
26	...	...	5.2	5.4	5.5	5.5	5.5	5.5	5.2	4.2	4.2	...	...	...	...	240	230	230	230	210	230	220	230	240	...	...
27	...	...	5.2	5.4	5.5	5.5	5.9	5.5	5.1	5.0	4.3	...	...	...	...	230	230	220	220	230	230	210	210	260	...	...
28	...	...	5.2	5.2	5.2	5.3	5.5	5.3	5.2	5.0	4.3	...	...	...	...	230	230	220	220	220	220	220	230	260	...	...
29	...	...	5.1	5.2	5.3	5.5	5.5	5.3	5.2	5.2	5.0	...	...	...	...	230	230	230	220	220	210	210	230	250	...	...
30	...	...	5.0	5.4	5.4	5.5	5.5	5.3	5.1	5.0	4.3	...	...	...	...	240	230	240	230	210	210	220	220	250	...	...
31	...	...	5.0	5.2	5.3	5.5	5.5	5.4	4.8	4.4	4.5	...	...	...	...	230	230	230	220	220	210	200	210	260	...	...
* MEAN	...	4.8	5.1	5.3	5.4	5.5	5.5	5.4	5.2	5.0	4.5	...	...	...	245	240	233	225	221	217	213	219	225	247	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 90

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1939

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.2	2.2	2.1	2.2	2.2	2.3	2.4	2.2	2.1	2.2	2.2	1.0	2.1	2.9	4.1	4.0	4.1	4.3	4.2	4.2	4.1	3.8	3.2	2.5	1.4
2	1.1	1.8	2.2	2.2	2.2	2.2	2.4	3.1	3.0	2.0	1.4	0.8	1.1	2.1	2.9	3.6	4.0	4.2	4.2	4.5	4.3	4.1	3.9	3.2	2.5	1.4
3	1.0	1.2	2.1	2.3	2.6	2.1	2.3	2.2	2.2	2.2	1.8	1.1	1.0	2.3	3.0	3.7	3.9	4.2	4.5	4.2	4.2	4.0	3.7	3.3	2.6	1.3
4	1.1	2.1	2.1	2.3	2.4	2.4	2.4	2.3	2.2	2.0	1.2	1.1	1.0	2.2	3.0	3.5	4.1	4.3	4.3	4.3	4.1	4.0	3.6	3.1	2.4	1.3
5	1.8	2.1	2.2	2.3	2.3	2.5	2.4	2.4	3.1	2.2	1.2	1.2	1.0	2.2	3.0	3.5	4.0	4.2	4.5	4.2	4.1	4.2	3.7	3.1	2.5	1.4
6	1.0	2.0	0.8	0.8	2.2	2.0	2.2	2.2	2.2	2.2	1.2	1.2	1.0	2.2	2.8	3.4	3.0	3.9	3.9	3.9	4.2	3.9	3.7	3.1	2.5	1.3
7	1.0	2.0	2.1	2.2	2.3	2.2	2.3	3.1	2.1	1.3	1.2	1.0	0.7	2.2	2.9	3.5	3.8	4.1	4.3	4.3	4.6	3.9	3.5	3.0	2.4	1.0
8	1.0	1.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	1.2	0.8	0.9	2.1	2.9	3.5	3.7	4.0	4.2	4.1	4.1	4.0	3.5	3.1	3.3	1.2
9	0.7	1.1	1.2	2.1	2.2	2.3	...c	...c	...c	...c	...c	...c	1.2	2.0	2.3	3.5	3.7	3.9	4.1	...c	...c	...c	...c	...c	...c	1.2
10	1.5	1.1	1.5	2.2	2.2	2.4	2.3	2.2	2.3	2.2	1.4	0.9	1.3	2.1	3.0	3.1	3.7	4.0	4.1	4.2	4.1	3.8	3.6	3.2	2.4	1.3
11	1.8	2.1	2.2	2.3	2.3	2.2	2.3	2.3	2.2	2.1	1.8	0.8	1.0	2.2	3.1	3.4	3.9	4.2	4.2	4.2	4.0	3.9	3.5	3.0	2.4	1.2
12	0.8	1.0	2.2	2.3	2.4	2.3	2.3	2.4	2.2	2.1	1.4	0.9	1.0	2.1	3.0	3.5	3.8	4.0	4.1	4.0	4.0	3.9	3.5	3.1	2.4	1.2
13	1.0	1.2	2.1	2.2	2.3	1.7	p4.1b	2.3	2.3	2.3	2.0	0.8	0.9	2.1	2.9	3.5	3.8	4.0	4.2	4.1	4.1	3.8	3.6	3.1	2.2	1.3
14	1.8	1.8	2.2	2.2	2.3	1.8	2.3	2.3	2.2	2.1	1.3	0.8	1.4	2.1	2.8	3.5	3.7	3.9	4.1	4.1	4.0	3.8	3.5	3.0	2.3	1.4
15	1.8	1.8	2.1	2.2	2.2	2.2	2.3	2.2	2.2	1.8	1.8	0.8	1.1	2.2	2.9	3.5	3.7	4.0	4.1	4.1	4.0	3.8	3.5	3.1	2.4	1.1
16	2.0	2.0	2.1	2.2	1.9	2.3	2.2	2.3	3.0	2.2	1.8	1.8	1.4	2.1	3.0	3.5	3.8	4.0	4.1	4.0	4.1	4.2	3.5	3.0	2.4	1.4
17	2.0	1.7	2.2	1.3	2.2	2.3	2.3	2.3	2.3	2.2	1.8	1.7	1.3	2.2	2.9	3.6	3.8	4.0	4.0	4.1	4.1	4.0	3.6	3.0	2.4	1.3
18	1.8	2.2	2.2	2.3	2.3	2.3	2.4	2.3	p2.3b	2.4	1.8	0.9	1.4	2.2	2.9	3.6	3.9	4.2	4.2	4.2	4.1	4.4	3.7	3.1	2.4	1.4
19	1.8	1.8	1.7	2.9	2.4	2.3	2.3	2.3	2.3	2.2	1.8	2.1	0.8	2.3	2.9	3.9	4.0	4.2	4.2	4.2	4.1	3.9	3.6	3.0	2.6	1.4
20	1.1	2.1	2.0	3.8	2.4	2.7	3.0	2.3	2.3	2.2	1.8	1.2	1.5	2.3	3.0	3.6	4.3	4.2	4.3	4.2	4.2	4.0	3.7	3.1	2.5	1.5
21	1.8	1.8	2.1	1.8	2.2	2.3	2.3	2.2	2.2	1.8	1.8	1.6	1.4	2.3	3.4	3.6	4.0	4.2	4.3	4.3	4.1	3.9	3.5	3.4	2.5	1.4
22	1.8	1.7	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	1.3	1.0	2.3	3.0	3.5	4.0	4.2	4.2	4.3	4.1	3.9	3.7	3.6	2.5	1.5
23	0.8	1.8	2.0	2.0	2.2	2.2	2.3	2.0	2.3	2.4	2.2	0.8	1.2	0.8	2.2	3.0	3.5	3.9	4.2	4.2	4.2	4.1	4.2	3.6	3.0	2.4
24	1.7	2.2	2.2	2.2	2.3	2.5	2.3	2.4	2.2	2.1	1.7	1.0	1.4	2.3	3.0	3.8	3.8	4.1	4.2	4.2	4.2	3.9	3.6	3.2	2.5	1.4
25	1.0	1.8	2.1	2.2	2.2	2.3	2.3	2.3	2.2	2.2	1.4	1.2	1.4	2.3	3.0	3.6	3.8	4.1	4.2	4.2	4.1	4.0	3.6	3.1	2.4	1.4
26	0.8	1.8	2.1	2.1	2.2	2.3	2.3	2.3	2.2	2.1	1.8	1.8	1.4	2.3	3.0	3.5	3.8	4.1	4.2	4.2	4.1	3.9	3.6	3.1	2.4	1.4
27	0.8	1.9	2.2	2.2	2.2	2.3	2.3	1.8	2.2	2.1	2.1	1.6	1.4	2.3	3.0	3.6	3.9	4.0	4.2	4.1	4.1	4.0	3.5	3.2	2.5	1.4
28	2.0	1.8	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	1.4	1.7	1.0	2.2	3.0	3.5	3.8	4.1	4.2	4.0	4.0	3.9	3.6	3.5	2.4	1.5
29	1.7	1.7	2.0	2.1	2.2	2.3	2.3	2.3	2.3	2.1	1.8	1.2	1.5	2.3	3.0	3.6	3.8	4.0	4.2	4.1	4.0	3.8	3.6	3.1	2.4	1.5
30	1.7	2.0	2.0	2.3	2.3	2.3	2.2	2.2	2.2	2.1	1.8	2.0	1.6	2.3	3.0	3.5	3.8	4.0	4.1	4.1	4.0	3.8	3.6	3.2	2.5	1.6
31	0.9	2.0	2.2	2.2	2.3	2.3	2.3	2.3	2.2	1.8	1.1	1.2	1.1	2.3	3.0	3.6	3.8	4.0	4.1	4.1	4.0	3.8	3.6	3.1	2.4	1.5
* MEAN	1.4	1.7	2.0	2.2	2.3	2.3	2.4	2.3	2.3	2.1	1.6	1.2	1.2	2.2	2.9	3.5	3.8	4.1	4.2	4.2	4.1	4.0	3.6	3.2	2.5	1.4

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 91

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	11.6	10.6	9.6	6.9	...c	...c	...c	...c	...c	13.9	13.5	12.9	11.4	11.2	11.6	12.0	12.2	12.6	11.5	9.6	8.3	8.5	9.5	10.2	...
2	9.7	7.7	6.7	6.4	6.4	6.1	9.2	11.7	13.4	13.6	12.7	12.0	12.0	11.8	12.2	12.0	12.0	12.0	11.5	9.7	p8.7f	7.6	p7.4f	p7.2f	10.0
3	p7.0f	6.8	6.9	6.0	5.0	4.3	8.4	10.9	11.9	13.6	13.8	13.2	13.5	13.1	13.0	13.3	12.9	12.2	11.2	10.4	10.9	11.2	10.5	10.3	10.4
4	10.0	8.6	7.4	6.4	6.0	6.3	8.9	11.1	12.7	13.9	14.0	14.0	13.6	13.6	12.8	11.9	10.4	9.8	9.5	8.9	8.6	8.0	8.0	8.5	10.1
5	8.7	8.9	7.3	5.2	4.8	4.3	8.1	10.5	12.2	12.9	13.2	13.1	12.5	12.0	11.5	11.2	10.9	10.5	10.1	9.6	8.0	p8.0f	p8.1f	p8.1f	9.6
6	p8.2f	8.2	8.4	7.8	7.1	6.7	8.7	11.0	12.2	13.1	13.0	13.0	13.2	12.8	12.6	12.4	11.8	11.2	10.5	9.6	7.7	8.1	7.9	7.6	10.1
7	7.0	7.1	6.7	5.9	5.6	5.5	8.6	10.8	12.5	13.1	13.0	12.5	12.0	12.5	13.1	13.2	13.4	12.3	10.8	8.2	7.2	7.3	6.8	9.9	9.8
8	7.0	7.5	7.2	5.3	3.9	3.8	7.8	10.7	11.6	11.7	11.8	12.4	12.7	13.1	13.2	13.3	13.4	12.6	11.2	9.4	7.8	6.9	7.3	7.8	9.6
9	7.2	7.3	8.1	8.6	6.3	5.3	8.3	11.0	12.5	13.0	13.0	12.5	13.1	13.4	14.0	13.9	13.2	13.4	12.8	12.0	11.6	10.8	9.7	9.8	10.9
10	p8.9f	8.0	6.8	5.6	4.1	3.9	7.3	9.6	10.7	10.3	10.2	10.4	10.5	10.6	12.1	12.8	12.7	12.7	12.1	11.4	p10.8f	10.2	p9.6f	p9.0f	9.6
11	p8.4f	7.7	6.6	5.7	4.4	4.2	7.8	10.4	11.4	10.2	9.6	10.0	10.7	11.2	11.9	12.4	12.5	12.7	12.3	11.5	11.2	10.6	11.1	10.8	9.8
12	9.3	6.3	4.7	3.5	2.8	3.9	7.9	10.4	11.6	11.9	11.4	10.5	10.1	10.7	11.0	11.5	12.2	12.7	12.4	11.3	9.6	p8.8f	7.9	8.6	9.2
13	p8.0f	p7.5f	p7.0f	6.4	6.2	6.5	7.5	10.5	12.1	14.0	13.7	13.9	13.4	13.3	12.0	12.3	12.5	12.6	12.8	12.6	12.0	10.7	p10.4f	p10.1f	10.8
14	p9.8f	p9.5f	9.3	p9.0f	8.7	9.1	10.4	11.7	12.2	12.3	12.0	11.8	11.8	12.2	12.7	12.6	13.0	12.7	12.0	10.9	10.5	10.9	10.3	p9.9f	11.1
15	p9.5f	9.0	7.9	5.6	4.3	4.2	8.2	10.9	12.6	13.1	13.6	13.4	13.4	13.1	13.3	13.0	12.7	12.1	11.8	11.2	10.2	9.7	9.6	p9.2f	10.5
16	p8.9f	p8.6f	8.2	6.8	4.1	4.3	8.2	11.3	12.7	12.7	12.4	11.6	11.6	11.6	11.1	11.3	12.0	12.3	11.7	10.1	p8.3f	6.6	p6.7f	6.9	9.6
17	p6.9f	6.8	6.1	6.4	5.9	5.9	8.8	11.4	12.4	13.3	13.1	12.8	11.1	11.1	11.1	10.9	11.1	10.9	10.5	9.8	9.1	8.9	8.2	7.9	9.6
18	7.8	7.8	7.6	6.9	5.3	4.4	8.4	11.0	12.0	12.8	13.3	13.3	12.9	12.0	11.7	10.8	10.4	9.9	9.8	9.4	8.7	8.3	8.3	8.2	9.6
19	7.5	7.0	6.6	6.5	5.8	5.1	8.3	10.4	12.1	12.7	13.1	13.9	13.8	13.7	14.2	13.8	14.1	13.5	12.2	8.6	p9.0f	9.4	p8.4f	7.5	10.3
20	7.6	p8.9f	10.2	7.5	p7.4f	7.3	7.0	10.0	11.8	12.7	12.8	13.4	14.0	13.1	14.1	14.4	13.5	12.8	9.6	9.2	9.1	8.5	8.7	8.9	10.5
21	7.8	6.7	6.7	5.7	5.4	5.5	8.4	10.6	12.0	13.1	13.8	14.1	14.3	14.0	14.2	13.5	13.4	13.8	12.2	11.8	8.7	p8.2f	7.7	6.9	10.4
22	p6.7f	p6.5f	p6.3f	p6.1f	5.8	4.8	8.0	10.3	11.3	11.8	12.0	11.8	12.2	12.4	12.4	12.6	12.4	11.9	10.2	9.0	9.2	8.8	9.7	9.7	9.7
23	9.0	8.7	8.2	5.2	3.6	4.1	7.2	9.6	10.7	11.5	11.9	12.1	12.4	12.8	12.6	12.8	12.3	11.4	10.0	9.4	p8.7f	p8.0f	7.3	7.7	9.5
24	8.4	8.3	8.2	7.3	6.2	5.5	8.3	10.5	11.9	12.6	12.6	11.3	11.5	10.9	10.8	10.5	10.4	10.1	10.0	8.8	8.0	7.3	6.9	6.6	9.3
25	6.6	6.6	7.0	7.1	7.3	6.7	9.2	11.5	12.6	13.5	14.0	14.1	14.0	13.7	13.8	13.5	12.5	11.4	10.7	11.4	10.5	10.4	9.4	8.4	10.7
26	9.4	9.5	8.8	8.1	6.9	5.2	8.4	10.7	12.1	12.5	12.7	12.5	12.9	13.0	12.4	12.1	11.7	11.1	10.6	9.4	7.6	7.2	6.9	6.7	9.9
27	7.0	7.0	6.2	5.5	4.7	4.7	8.5	11.1	12.6	13.4	13.8	13.8	13.7	13.1	12.0	12.2	12.6	8.8	12.1	11.7	10.6	9.6	9.1	8.7	10.1
28	7.7	7.6	8.0	8.2	8.0	6.4	8.7	11.0	12.6	12.7	13.2	12.5	12.0	11.6	11.1	10.7	11.3	11.9	12.4	12.2	10.4	8.4	6.5	6.7	10.1
29	6.3	5.9	p5.9f	5.8	5.6	5.3	8.2	10.8	12.0	12.7	13.0	13.0	13.4	13.3	12.9	12.9	12.2	11.7	10.9	10.1	9.0	7.5	7.2	6.5	9.7
30	6.4	6.6	7.2	6.8	6.4	6.2	8.9	10.8	11.8	12.7	13.0	12.0	11.3	11.0	10.6	10.2	10.0	10.2	10.0	10.1	9.4	9.1	8.9	8.7	9.5
31																									
MEAN*	8.1	7.8	7.4	6.5	5.6	5.4	8.3	10.8	12.1	12.7	12.8	12.6	12.5	12.4	12.4	12.3	12.2	11.8	11.2	10.2	9.3	8.8	8.5	8.4	10.0

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 92

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

NOVEMBER 1939

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	250	240	250	...c	...c	...c	...c	...c	...c	280	280	300	310	290	280	260	290	250	310	420	400	370	300	230	...
2	220	250	260	280	250	260	260	250	260	280	290	300	300	290	280	270	260	260	310	420	450	440	370	300	296
3	260	260	240	230	230	250	260	240	270	290	280	300	300	320	300	280	270	260	300	360	360	330	350	320	286
4	260	240	240	250	290	350	260	240	270	270	290	300	300	310	290	260	280	260	300	360	330	340	320	290	288
5	230	230	250	230	240	250	250	240	270	280	290	310	300	290	290	260	270	270	300	390	450	450	270	320	289
6	290	210	240	240	260	270	260	250	290	290	290	300	310	300	300	280	280	250	280	370	430	360	360	280	291
7	240	250	240	250	250	270	250	250	290	290	310	320	310	310	300	290	270	250	300	360	400	390	380	310	295
8	250	230	240	240	250	270	260	240	300	300	290	310	310	300	300	280	280	260	300	390	350	370	340	300	290
9	280	240	260	230	240	240	230	240	280	300	300	310	300	300	300	310	290	260	290	340	350	360	330	280	286
10	270	240	240	240	250	260	260	240	290	310	320	310	310	330	310	290	310	260	290	360	450	390	350	350	301
11	280	250	260	250	250	270	250	240	310	310	310	320	330	320	300	290	280	270	290	340	370	330	290	250	290
12	230	230	250	250	260	280	260	240	280	300	300	330	310	300	310	290	280	260	290	390	400	420	350	350	298
13	470	430	380	260	260	340	260	240	270	280	290	300	310	290	300	300	270	260	290	340	400	400	405	430	324
14	470	470	450	380	300	250	250	250	260	290	310	310	300	300	280	270	270	260	300	380	380	360	350	330	324
15	280	250	240	230	240	270	250	240	270	290	300	310	310	320	290	290	290	260	300	360	350	350	310	280	287
16	270	240	240	230	230	260	260	250	280	280	310	310	310	320	300	310	280	260	290	420	480	410	370	320	301
17	270	260	240	240	230	250	260	250	270	290	300	320	320	320	300	270	280	270	290	350	360	350	320	290	288
18	270	260	240	230	230	260	250	240	290	280	300	330	300	300	300	280	270	270	290	350	350	330	270	260	281
19	240	240	240	240	240	260	260	240	300	300	280	280	230	290	300	290	280	260	300	310	380	360	300	300	280
20	340	330	340	320	270	300	260	240	280	280	270	300	q310a	q310a	300	280	290	270	290	340	360	370	380	330	307
21	270	230	250	240	250	270	250	250	250	280	300	300	310	310	q300a	300	300	260	300	350	350	430	420	420	300
22	440	410	280	250	230	250	250	240	230	300	310	310	310	260	300	260	270	260	290	340	340	350	350	350	299
23	310	280	240	240	240	270	250	240	300	290	290	310	310	310	300	290	260	260	290	360	430	380	430	410	304
24	310	280	260	250	250	270	260	240	250	290	300	300	300	330	290	260	250	250	290	340	340	400	370	330	292
25	290	250	270	300	270	250	250	240	260	290	280	300	310	310	290	280	320	260	260	280	320	340	340	340	288
26	280	260	270	240	230	260	260	230	280	280	240	300	300	300	280	270	270	260	290	380	420	420	380	330	293
27	300	250	230	230	230	250	250	210	250	280	280	300	300	290	270	270	260	270	290	340	320	340	400	370	282
28	290	270	250	240	220	240	250	240	290	300	310	310	320	320	310	300	270	270	270	340	390	410	415	360	299
29	330	310	350	270	230	240	250	260	270	290	290	300	300	310	310	280	270	270	290	340	370	400	390	370	304
30	320	280	280	250	250	250	260	250	280	290	300	310	300	320	300	300	260	250	290	320	330	320	310	310	289
31																									
MEAN*	294	272	267	253	247	266	255	242	275	289	294	307	305	306	296	282	277	261	292	358	380	376	351	324	295

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 93

NOVEMBER 1939 | NOVEMBER 1939

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	p5.0c	5.2	5.3	5.5	5.5	5.3	5.1	4.6	4.3	...	...
2	...	4.1	4.8	5.2	5.5	5.5	5.4	5.2	4.4	4.8	4.2	...	...
3	...	...	5.0	5.2	5.3	5.5	5.5	5.5	5.5	4.8	4.2	...	...
4	...	...	4.8	5.0	5.3	5.5	5.5	5.5	5.0	4.4	4.0	...	...
5	...	...	5.0	5.2	5.4	5.5	5.3	5.2	5.0	4.4	4.2	...	...
6	...	...	5.2	5.2	5.2	5.4	5.5	5.4	5.2	4.8	4.8	...	...
7	...	...	5.0	5.2	5.4	5.5	5.4	5.5	5.4	4.9	4.4	...	...
8	...	...	5.3	5.3	5.3	5.5	5.5	5.1	4.6	4.2	4.2	...	...
9	...	...	5.1	5.2	5.3	5.5	5.4	5.3	5.2	5.1	4.4	...	...
10	...	...	5.2	5.3	5.4	5.5	5.5	5.5	5.4	5.0	5.2	...	...
11	...	...	5.2	5.2	5.3	5.5	5.5	5.4	5.0	4.6	4.3	...	...
12	...	...	5.0	5.2	5.2	5.4	5.4	5.2	5.2	4.8	4.3	...	...
13	...	...	5.0	5.0	5.2	5.3	5.5	5.2	5.2	4.8	4.3	...	...
14	...	...	4.4	5.1	5.5	5.5	5.4	5.4	5.0	4.6	4.3	...	...
15	...	...	4.9	5.2	5.4	5.5	5.5	5.5	5.1	4.6	4.6	...	...
16	...	...	5.1	5.2	5.5	5.5	5.5	5.5	5.2	5.1	4.4	...	...
17	...	...	5.2	5.3	5.5	5.5	5.5	5.4	5.0	4.5	4.3	...	...
18	...	...	5.2	5.2	5.5	5.6	5.5	5.4	5.4	4.7	4.0	...	...
19	...	...	5.2	5.2	5.4	5.2	5.6	5.4	5.2	4.8	4.2	...	...
20	...	...	5.1	5.2	5.2	5.5	p5.5a	p5.4a	5.3	4.8	4.5	...	...
21	...	...	4.4	5.2	5.5	5.5	5.5	5.5	p5.3a	5.2	5.1	...	...
22	...	...	p5.0	5.2	5.4	5.5	5.4	5.0	5.0	4.6	4.3	...	...
23	...	...	5.0	5.2	5.2	5.4	5.4	5.3	5.2	4.8	4.0	...	...
24	...	...	4.5	5.1	5.4	5.5	5.5	5.5	5.1	4.5	4.0	...	...
25	...	...	4.8	5.4	5.3	5.3	5.5	5.5	5.2	5.0	5.0	...	...
26	...	...	5.1	5.1	4.8	5.2	5.5	5.3	4.9	4.6	4.3	...	...
27	...	...	4.3	5.0	5.2	5.5	5.4	5.3	5.0	4.8	3.8	...	...
28	...	...	5.0	5.2	5.5	5.4	5.7	5.5	5.2	5.2	4.3	...	...
29	...	5.0	5.2	5.2	5.3	5.4	5.5	5.5	5.4	4.6	4.3	...	...
30	...	...	5.1	5.2	5.3	5.5	5.3	5.5	5.2	5.0	4.3	...	...
31													
MEAN*	...	4.6	5.0	5.2	5.3	5.5	5.5	5.4	5.1	4.8	4.4	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	p240c	230	210	210	210	220	220	200	250	...	...
2	...	240	230	230	210	220	220	210	220	220	250	...	...
3	...	...	240	230	220	210	190	230	200	200	230	...	...
4	...	...	220	230	230	220	210	220	220	220	240	...	...
5	...	...	240	220	230	210	200	210	240	210	230	...	...
6	...	...	240	220	220	220	230	200	200	200	240	...	...
7	...	...	230	220	220	210	210	210	210	210	200	...	...
8	...	...	240	220	210	210	200	210	230	230	230	...	...
9	...	...	220	220	230	220	210	210	220	220	250	...	...
10	...	...	230	220	230	220	200	200	200	240	230	...	...
11	...	...	240	230	210	210	210	210	220	210	220	...	...
12	...	...	230	215	210	220	210	200	210	200	250	...	...
13	...	...	230	230	220	230	210	220	215	220	240	...	...
14	...	...	250	240	220	230	220	210	220	210	230	...	...
15	...	...	240	230	220	230	220	220	220	220	230	...	...
16	...	...	230	220	220	210	220	210	220	220	250	...	...
17	...	...	230	220	220	210	210	210	210	200	240	...	...
18	...	...	240	230	220	230	210	210	210	210	230	...	...
19	...	...	220	230	220	220	210	215	220	230	205	...	...
20	...	...	215	220	200	230	250	240	200	210	230	...	...
21	...	...	230	230	230	230	250	230	250	220	240	...	...
22	...	...	p230	220	220	220	210	205	210	210	240	...	...
23	...	...	240	220	220	220	210	210	220	210	220	...	...
24	...	...	230	220	220	210	210	220	210	210	220	...	...
25	...	...	220	240	240	230	220	220	210	215	230	...	...
26	...	...	230	220	220	220	220	220	210	210	220	...	...
27	...	...	220	230	230	220	210	215	210	220	220	...	...
28	...	...	230	230	220	210	220	220	210	240	250	...	...
29	...	240	230	200	220	210	230	230	220	210	220	...	...
30	...	...	250	220	230	210	210	230	230	210	250	...	...
31													
MEAN*	...	240	232	225	221	218	215	215	216	214	233	...	...

*=ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TAPLE 94

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1939 NOVEMBER 1939

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...c	...c	...c	2.2	2.1	2.3	2.4	2.3	2.2	1.7	1.3	0.8	1.2
2	1.9	2.2	2.1	2.2	2.2	2.3	2.4	2.3	2.2	2.0	1.1	1.0	1.0
3	1.6	1.2	2.1	2.2	2.3	2.3	2.2	2.3	2.1	2.1	1.1	0.8	1.1
4	1.8	2.1	2.2	2.1	2.2	2.3	2.3	2.2	2.2	2.1	1.7	0.8	1.3
5	2.1	2.2	2.1	2.2	2.2	2.2	2.3	2.2	2.2	2.1	1.6	1.2	1.0
6	1.1	1.8	2.1	2.2	2.4	2.3	2.2	2.2	2.2	2.0	1.7	1.2	1.1
7	0.8	2.0	2.2	2.3	2.3	2.3	2.3	2.3	2.2	1.6	1.8	1.1	1.4
8	0.8	1.4	2.1	2.2	2.3	2.3	2.3	3.0	2.2	2.1	1.2	0.8	1.7
9	0.8	1.2	1.8	2.1	2.2	2.2	2.3	2.3	2.2	1.8	1.4	1.6	1.4
10	0.8	1.2	1.8	2.0	2.1	2.3	2.3	2.5	2.1	2.1	1.3	0.8	1.0
11	1.0	1.2	1.4	2.1	2.2	2.2	2.3	2.4	2.3	2.0	1.8	1.0	1.5
12	0.8	1.8	1.8	2.1	2.2	2.2	2.3	2.2	2.2	2.0	1.8	1.9	1.4
13	1.9	1.9	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.0	2.0	1.7	1.6
14	0.8	1.2	1.8	2.2	2.2	2.3	2.3	2.2	2.2	2.1	1.8	1.4	1.1
15	0.8	0.8	1.8	2.1	2.3	2.3	2.3	2.2	2.2	2.0	0.9	1.6	0.8
16	0.8	1.2	2.0	2.2	2.2	2.3	2.4	2.3	2.2	2.2	1.8	0.9	1.1
17	0.8	1.4	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.0	1.2	0.8	1.1
18	1.1	1.7	1.8	2.2	2.3	2.2	2.3	2.3	2.1	2.1	2.0	1.1	1.0
19	0.8	1.2	1.8	2.1	2.4	2.3	2.4	2.4	2.2	2.0	1.2	0.8	1.6
20	0.8	1.0	1.3	1.8	2.1	2.2	3.0	2.1	2.1	1.9	1.7	1.0	1.6
21	0.8	0.8	1.9	2.0	2.1	2.2	2.3	2.2	2.1	2.0	1.3	0.8	1.0
22	0.8	0.8	1.4	2.0	2.0	2.1	2.1	2.2	2.1	1.8	1.3	0.8	1.5
23	0.8	1.1	1.7	1.9	2.1	2.2	2.2	2.1	2.0	2.0	1.8	1.8	1.1
24	0.8	1.1	2.0	2.1	2.2	2.2	2.1	2.2	2.2	1.9	1.2	0.8	1.5
25	0.8	1.8	1.9	2.0	2.1	2.2	2.2	2.2	2.0	1.8	1.1	0.8	1.1
26	0.8	0.8	1.8	1.8	2.1	2.1	2.2	2.1	2.1	1.9	1.1	0.8	1.0
27	1.0	0.8	1.8	1.9	2.2	2.1	2.2	2.2	2.2	2.0	2.0	0.5	1.4
28	1.1	1.1	1.3	2.1	2.1	2.2	2.2	2.0	1.8	1.7	1.8	0.8	0.8
29	0.8	1.2	1.2	2.7	1.7	1.8	1.9	1.8	1.8	1.7	1.8	0.8	1.0
30	0.8	1.1	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.9	0.8	1.3
31													
MEAN*	1.0	1.4	1.8	2.1	2.2	2.2	2.3	2.2	2.1	2.0	1.5	1.0	1.2

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...c	...c	...c	3.8	3.9	4.1	4.1	3.9	3.9	3.5	3.0	2.4	1.2
2	2.3	2.9	3.5	3.9	4.0	4.1	4.1	3.9	3.7	3.5	3.0	2.3	1.2
3	2.2	2.9	3.3	3.7	3.7	4.1	4.0	4.1	3.8	3.5	2.4	2.3	1.3
4	2.3	3.0	3.4	3.8	4.1	4.0	3.9	4.0	3.7	3.5	2.4	2.4	1.3
5	2.6	3.0	3.4	3.7	3.9	3.9	4.0	3.9	3.6	3.4	2.9	2.3	1.3
6	2.2	2.9	3.5	3.7	4.0	4.0	4.0	3.9	3.6	3.4	3.0	2.3	1.3
7	2.2	2.9	3.4	3.8	3.9	4.0	4.0	3.9	3.7	3.4	2.8	2.3	1.4
8	2.3	3.0	3.4	3.6	3.9	4.0	3.9	3.9	3.7	3.4	2.5	2.4	1.7
9	2.3	2.9	3.4	3.6	3.9	3.9	3.9	3.9	3.7	3.4	3.0	2.4	1.4
10	2.3	2.4	3.3	3.7	3.9	3.9	3.9	3.8	3.6	3.4	3.0	2.4	1.3
11	2.3	2.9	3.4	3.6	3.9	3.9	4.0	3.9	3.6	3.4	2.9	2.4	1.5
12	2.2	2.9	3.4	3.7	3.8	3.9	4.0	3.9	3.7	3.4	2.9	2.4	1.4
13	2.2	2.9	3.4	3.6	3.9	4.0	4.0	3.9	3.7	3.4	3.0	2.4	1.6
14	2.3	2.9	3.4	3.7	3.9	4.1	4.1	3.9	3.8	3.4	2.9	2.4	1.3
15	2.4	3.0	3.4	3.7	3.9	4.1	4.1	4.0	3.7	3.5	3.0	2.5	0.9
16	2.4	3.0	3.4	3.7	4.0	4.0	4.1	4.0	3.8	3.5	3.0	2.5	1.4
17	2.4	3.1	3.6	3.8	4.0	4.0	4.1	4.0	3.9	3.5	3.0	2.4	1.4
18	2.4	3.1	3.4	3.8	3.9	4.0	4.0	3.9	3.8	3.5	3.1	2.4	1.4
19	2.3	3.0	3.4	3.8	3.8	4.0	4.0	3.9	3.8	3.5	3.0	2.5	1.6
20	2.4	2.9	3.4	3.8	4.0	4.4	4.4	4.5	3.8	3.5	3.0	2.5	1.6
21	2.3	3.0	3.5	3.7	4.0	4.1	5.0	4.3	4.3	3.4	2.9	2.4	1.4
22	2.4	2.9	3.4	3.7	3.8	4.0	4.0	3.9	3.7	3.4	3.0	2.4	1.5
23	2.3	3.0	3.5	3.6	4.0	4.0	4.2	4.0	3.9	3.5	3.1	2.6	1.1
24	2.3	3.0	3.4	3.8	4.0	4.0	4.1	4.1	3.8	3.5	3.1	2.5	1.5
25	2.3	3.0	3.5	3.9	4.0	4.2	4.0	4.0	3.8	3.4	3.1	2.5	1.4
26	2.3	2.5	3.4	3.7	3.9	4.0	4.0	4.0	3.9	3.5	3.1	2.5	1.6
27	2.3	2.2	3.4	4.1	4.1	4.1	4.1	4.0	3.8	3.5	3.1	1.0	1.4
28	2.3	3.0	3.4	3.7	3.9	4.0	4.1	4.0	3.8	4.2	3.6	2.8	1.8
29	2.3	3.0	3.4	3.7	3.9	4.0	4.0	3.9	3.8	3.5	3.1	2.6	1.5
30	2.4	3.0	3.5	3.7	3.9	4.1	4.0	3.9	3.7	3.4	3.2	2.6	1.6
31													
MEAN*	2.3	2.9	3.4	3.7	3.9	4.0	4.1	4.0	3.8	3.5	3.0	2.4	1.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 95

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1939 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — DECEMBER 1939

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.8	7.5	7.2	7.5	7.2	6.8	8.6	11.2	12.2	13.0	13.2	12.7	12.4	11.4	11.6	11.6	11.3	11.4	11.3	10.1	8.0	6.7	6.5	6.3	9.7
2	6.3	5.8	6.0	6.2	6.0	6.5	9.0	11.1	12.0	12.2	13.0	13.2	13.3	12.7	12.0	11.0	10.4	10.9	11.3	11.0	10.1	8.9	8.7	8.6	9.8
3	8.6	8.6	7.5	7.1	7.0	7.1	9.3	11.0	12.0	12.2	12.5	12.8	12.5	12.3	11.8	11.6	11.4	10.9	10.3	9.2	7.7	p7.5f	p7.3f	p7.1f	9.8
4	6.9	6.8	6.6	6.5	p6.7f	p6.9f	7.1	9.2	11.4	12.6	12.6	12.2	10.3	9.7	9.9	9.9	10.3	10.3	10.5	10.5	9.4	7.8	5.6	p5.8f	9.0
5	p5.9f	6.0	6.4	6.5	6.0	5.6	8.2	9.6	11.3	12.2	12.7	13.2	12.8	13.3	13.2	12.8	12.3	12.2	11.4	10.1	7.8	8.3	8.2	7.4	9.7
6	6.6	5.6	5.3	5.8	5.3	5.8	7.7	9.5	11.1	12.2	12.2	12.2	12.2	12.2	12.5	12.8	11.7	10.0	9.1	9.9	9.4	9.2	8.9	8.6	9.4
7	9.4	8.7	7.2	6.2	6.2	6.5	9.0	10.3	11.1	11.8	11.2	11.6	12.3	12.7	12.6	p12.2c	p11.8c	11.5	...c	...c	...c	...c	...c	...c	...
8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	13.7	13.6	13.5	14.1	13.3	13.4	13.3	13.3	13.0	12.0	9.6	7.5	6.8	6.6	...
9	p6.0f	5.3	5.6	5.9	4.8	4.4	7.3	9.8	11.1	11.5	11.5	11.1	11.5	11.2	11.6	10.8	11.1	10.7	10.0	10.3	9.4	8.6	p7.7f	6.9	8.9
10	p6.6f	6.3	6.5	6.4	5.7	4.3	7.5	10.0	11.0	11.8	11.8	11.0	10.5	11.0	11.0	10.7	10.5	10.9	11.2	11.7	10.8	8.8	8.2	...c	...
11	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.3	11.3	10.3	9.3	8.5	8.4	...
12	7.7	6.8	5.9	5.5	5.0	4.7	7.9	9.1	10.8	11.6	12.4	11.6	9.9	9.6	10.6	11.8	11.8	11.7	12.3	12.3	11.3	9.5	8.0	7.2	9.4
13	8.1	p8.1f	8.1	p7.2f	p6.4f	5.6	7.9	10.0	11.1	11.9	12.0	11.1	10.9	11.0	11.8	12.6	13.0	13.2	12.5	11.7	10.3	8.8	7.8	7.5	9.9
14	8.0	8.0	5.5	4.3	2.9	3.3	7.1	9.5	11.1	p...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.6	...c	...c	...c	...
15	...c	...c	...c	...c	...c	...c	...c	...c	10.6	11.4	11.2	10.8	11.3	11.5	11.4	11.8	12.1	12.5	12.0	11.0	9.0	7.5	6.7	...f	...
16	...f	...f	...f	5.0	p5.0f	5.0	7.5	9.7	11.6	12.2	12.9	13.0	12.6	12.9	13.3	13.4	12.8	12.7	12.1	11.0	10.1	8.7	8.5	9.5	...
17	8.4	7.7	7.4	7.5	6.8	6.0	8.3	10.0	11.2	12.0	12.6	13.1	13.2	12.7	12.5	11.3	10.3	10.0	10.2	10.2	9.1	8.2	7.9	6.6	9.7
18	...f	...f	...f	...f	...f	5.2	7.1	9.5	11.3	12.4	12.2	12.3	12.7	13.0	13.0	13.0	12.7	12.8	11.9	11.0	9.0	8.0	6.7	...f	...
19	...f	...f	...f	6.2	5.8	6.4	8.9	11.2	12.0	12.3	11.5	11.0	10.6	11.3	10.8	10.8	11.0	11.1	10.7	10.2	9.4	8.0	7.7	5.3	...
20	4.4	4.0	3.1	p3.0f	p2.8f	2.7	7.2	9.4	10.4	10.8	11.5	12.0	11.9	12.0	11.8	11.7	11.5	11.2	10 3	10.1	10.4	9.5	8.1	7.	8.6
21	6.8	6.8	5.9	p5.5f	p5.0f	p4.5f	7.5	10.1	10.9	11.6	11.6	11.7	12.9	13.4	13.1	12.1	11.9	12.1	13.0	12.4	10.3	9.4	9.9	9.9	9.9
22	7.7	...f	...f	...f	...f	...f	7.6	9.4	11.4	11.8	11.8	11.2	11.1	12.1	13.0	12.8	12.7	12.5	12.7	12.6	11.0	10.0	9.3	8.5	...
23	7.6	...f	...f	...f	...f	5.7	8.0	10.3	11.0	11.3	11.1	10.1	10.0	10.5	11.4	11.5	11.3	10.8	9.5	8.5	7.4	7.0	7.0	5.5	...
24	...f	...f	...f	...f	...f	4.8	7.6	10.0	11.3	11.8	11.7	11.5	11.1	10.9	11.5	12.0	12.2	12.4	12.4	12.5	11.2	10.1	...f	...f	...
25	...f	...f	3.6	...f	...f	...f	6.6	9.6	10.2	10.8	12.0	12.4	12.8	13.4	14.0	14.2	13.8	13.2	13.0	12.2	11.2	9.7	8.8	7.6	...
26	6.3	5.5	4.8	4.5	3.5	3.9	6.3	8.8	10.5	11.0	p10.7c	10.4	10.9	11.5	13.0	13.7	13.1	13.2	12.7	12.2	10.2	9.9	9.5	8.4	9.4
27	7.1	6.5	6.4	6.5	5.1	3.6	6.5	9.1	10.6	11.2	11.7	11.2	10.3	11.4	12.5	13.0	12.8	12.0	11.4	10.1	8.7	7.8	7.6	7.1	9.2
28	p6.6f	6.1	...f	...f	...f	...f	6.3	9.0	10.8	11.8	12.2	11.3	10.2	10.2	10.8	11.9	12.7	12.7	12.5	13.0	11.7	11.5	11.5	8.5	...
29	7.3	7.2	p6.7f	6.2	5.8	5.5	7.0	9.0	10.0	10.6	9.2	7.8	8.6	9.4	10.0	10.7	p11.0c	11.3	11.0	10.8	9.3	8.9	9.0	8.5	8.8
30	6.1	5.1	4.7	5.0	4.4	3.3	6.3	6.3	10.0	10.5	9.7	8.6	8.5	8.8	9.6	10.5	10.7	11.0	11.5	11.4	10.1	9.3	8.4	7.2	8.3
31	5.6	4.5	4.3	p4.1f	p3.9f	3.6	6.3	8.2	9.5	10.0	9.9	8.5	8.1	8.2	9.0	10.2	10.4	10.7	10.4	9.9	8.0	6.9	5.2	4.6	7.5
* MEAN	7.0	6.5	5.9	5.8	5.3	5.1	7.6	9.7	11.0	11.7	11.8	11.5	11.3	11.5	11.8	11.9	11.8	11.7	11.4	11.0	9.7	8.7	8.0	7.4	9.4

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 98

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1939 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — DECEMBER 1939

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	290	290	300	300	290	250	270	250	260	300	300	320	310	310	320	290	270	260	290	350	380	440	350	310	304
2	290	280	270	250	290	320	260	250	280	270	300	310	340	350	320	280	280	250	280	320	350	360	350	330	299
3	280	270	250	280	270	290	260	240	270	290	q320b	340	330	340	320	310	270	250	270	350	340	400	430	400	307
4	340	260	250	260	290	320	260	280	280	280	320	370	320	350	300	260	270	270	250	330	360	400	450	410	312
5	360	310	250	230	230	240	260	270	290	280	320	320	320	320	310	q290	270	250	280	340	360	310	290	300	292
6	260	260	250	240	250	270	250	240	290	290	330	300	300	300	340	340	290	240	270	260	290	280	270	300	280
7	300	350	360	270	240	260	250	230	290	290	300	320	290	310	310	320	270	240	280	...c	...c	...c	...c	...c	...
8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	260	280	330	330	310	290	280	240	260	320	400	410	460	430	...
9	380	370	330	230	230	240	260	240	290	300	310	310	330	340	330	310	260	250	280	300	310	370	400	410	308
10	400	370	300	270	210	240	260	240	290	290	330	340	310	320	350	290	260	250	260	310	370	410	410	q390c	295
11	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	280	310	350	350	310	270	...
12	250	240	250	250	230	230	260	q240c	290	310	360	320	310	330	310	240	260	260	280	300	340	390	420	400	295
13	340	350	320	300	300	280	250	220	300	310	320	310	350	350	340	300	260	250	240	290	300	340	400	340	313
14	300	260	250	250	260	290	260	230	290	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	330	320	...c	...c	...c	...
15	...c	...c	...c	...c	...c	...c	...c	...c	290	330	330	330	300	320	300	320	290	260	290	320	340	390	350	400	...
16	360	330	300	310	300	260	270	250	280	320	330	340	300	300	320	270	250	250	250	310	350	360	310	300	305
17	260	270	270	280	270	240	250	240	290	q320b	340	350	340	300	230	250	250	230	280	310	290	410	400	390	295
18	390	400	400	400	350	300	270	240	270	300	260	330	390	320	300	290	260	260	280	310	320	400	350	340	325
19	290	280	290	300	290	250	260	230	290	300	300	330	370	360	360	310	310	250	220	310	330	440	400	350	312
20	500	500	460	420	440	330	250	230	300	300	310	350	370	380	370	300	270	250	280	290	280	310	330	320	339
21	320	250	290	490	450	310	260	240	290	330	320	310	330	350	400	440	320	250	290	310	380	310	310	350	329
22	360	310	300	330	270	300	260	250	300	300	310	320	350	350	330	200	260	250	260	290	300	320	320	330	303
23	350	340	370	420	330	230	250	240	300	340	350	380	320	330	320	310	310	260	260	310	350	390	350	360	325
24	370	340	320	290	260	260	210	230	280	310	310	340	340	270	260	270	300	230	270	270	310	330	420	440	303
25	550	530	450	310	380	310	250	270	200	290	310	310	340	350	350	320	300	250	260	250	290	330	350	350	334
26	340	340	350	360	330	300	260	240	320	300	q320c	330	350	300	210	200	250	270	290	300	350	310	290	290	307
27	290	300	290	240	220	240	260	240	290	290	330	320	310	360	310	290	250	240	270	270	270	230	300	250	282
28	320	370	460	470	420	300	250	230	300	310	360	340	390	400	350	310	300	250	270	300	270	290	330	300	331
29	340	300	300	270	290	290	200	200	310	350	270	410	380	400	310	300	q300c	230	280	300	320	340	300	270	313
30	250	280	280	260	240	250	270	230	300	340	310	400	420	300	360	330	310	250	270	270	290	300	220	340	302
31	390	390	380	340	230	250	250	230	300	330	360	430	410	400	360	300	320	240	270	270	350	400	440	440	338
MEAN*	340	326	317	308	291	273	256	243	291	306	326	337	340	339	324	299	284	249	276	305	329	362	355	351	309

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 97

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.5	5.2	5.4	5.5	5.4	5.4	5.3	4.9	4.2	...	...
2	...	...	5.2	5.0	5.4	5.5	5.5	5.5	5.3	4.5	4.2	...	...
3	...	...	5.1	5.2	p5.4b	5.5	5.5	5.4	5.2	4.8	4.2	...	...
4	...	5.0	5.2	5.2	5.2	5.8	5.5	5.3	5.2	4.5	4.2	...	...
5	...	5.1	5.1	5.2	5.3	5.3	5.5	5.3	5.0	p4.7	4.4	...	...
6	...	...	5.2	5.2	5.5	5.3	5.3	5.1	5.5	5.3	4.2	...	...
7	...	...	5.0	5.3	5.5	5.4	5.3	5.3	5.3	5.3	4.3	...	...
8	...	...	p5.0c	p5.1c	5.1	5.2	5.5	5.4	5.2	4.8	4.3	...	...
9	...	...	5.2	5.1	5.4	5.4	5.4	5.4	5.2	5.0	4.1	...	...
10	...	...	5.0	5.1	5.5	5.5	5.4	5.3	5.4	4.7	4.3	...	...
11	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
12	...	...	5.1	5.3	5.5	5.5	5.4	5.5	5.2	4.4	4.3	...	...
13	...	...	5.1	5.2	5.5	5.3	5.5	5.5	5.4	5.0	4.5	...	...
14	...	...	5.2	...c	...c	...c	...c	...c	...c	...c	...c	...	...
15	...	...	5.2	5.3	5.4	5.5	5.3	5.4	5.2	5.2	4.4	...	...
16	...	...	5.2	5.2	5.3	5.5	5.2	5.2	5.2	4.5	4.5	...	...
17	...	...	5.0	p5.2b	5.4	5.7	5.5	5.3	4.5	4.6	4.3	...	...
18	...	...	5.2	5.3	5.1	5.5	5.8	5.4	5.2	4.6	4.3	...	...
19	...	...	5.2	5.1	5.2	5.4	5.7	5.4	5.4	5.1	4.9	...	...
20	...	...	5.0	5.0	5.2	5.5	5.5	5.4	5.5	5.0	4.4	...	...
21	...	...	5.2	5.2	5.3	5.3	5.4	6.0	5.8	6.5	5.5	...	...
22	...	...	5.2	5.0	5.4	5.3	5.4	5.5	5.2	4.7	4.5	...	...
23	...	...	5.0	5.2	5.4	5.7	5.3	5.2	5.2	5.0	4.8	...	...
24	...	...	4.7	5.2	5.2	5.3	5.4	5.0	4.7	4.5	4.8	...	...
25	...	4.8	4.8	4.9	5.2	5.2	5.3	5.4	5.4	5.0	4.8	...	...
26	...	...	5.2	4.8	p5.0	5.2	5.2	5.0	4.9	4.9	4.4	...	...
27	...	...	5.0	5.1	5.1	5.2	5.3	5.3	4.9	4.5	4.3	...	...
28	...	...	4.8	4.9	5.4	5.2	5.5	5.5	5.1	4.8	4.8	...	...
29	...	4.3	4.8	5.2	5.2	5.5	5.3	5.2	4.8	4.7	p4.6c	...	...
30	...	...	4.7	5.0	5.2	5.2	5.4	5.2	5.2	5.0	4.4	...	...
31	...	...	4.6	5.0	5.2	5.4	5.3	5.3	5.1	4.5	4.5	...	...
MEAN*	...	4.8	5.0	5.1	5.3	5.4	5.4	5.4	5.2	4.9	4.5	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	220	240	230	220	220	220	210	220	220	...	...
2	...	...	240	200	230	220	220	220	220	220	230	...	...
3	...	...	230	240	p230b	230	215	210	210	210	210	...	...
4	...	230	220	220	220	210	210	200	210	210	230	...	...
5	...	220	230	220	220	220	240	220	220	200	220	...	...
6	...	...	240	200	200	200	200	200	230	220	220	...	...
7	...	...	220	230	220	220	200	220	220	220	210	...	...
8	...	...	p230c	p230c	230	220	220	210	230	220	200	...	...
9	...	...	240	220	220	220	220	230	220	220	210	...	...
10	...	...	220	230	220	210	210	210	210	220	240	...	...
11	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
12	...	...	230	230	220	210	210	210	210	220	230	...	...
13	...	...	240	200	205	200	210	220	230	220	230	...	...
14	...	...	220	...c	...c	...c	...c	...c	...c	...c	...c	...	...
15	...	...	210	230	220	205	220	220	210	200	200	...	...
16	...	...	220	230	230	210	200	220	210	220	210	...	...
17	...	...	240	260	220	220	210	210	210	220	220	...	...
18	...	...	220	240	210	210	220	210	220	230	280	...	...
19	...	...	200	220	200	200	230	p220	210	210	230	...	...
20	...	...	220	220	210	210	210	200	210	210	220	...	...
21	...	...	230	210	210	220	220	220	200	230	230	...	...
22	...	...	250	220	210	210	210	220	220	210	220	...	...
23	...	...	230	220	220	p240	215	200	p260	220	200	...	...
24	...	...	230	220	210	210	200	190	200	200	180	...	...
25	...	250	250	220	220	220	230	250	260	210	210	...	...
26	...	...	240	210	p220c	220	220	220	200	200	220	...	...
27	...	...	230	220	210	210	210	210	210	210	230	...	...
28	...	...	230	215	200	210	200	210	210	210	230	...	...
29	...	...	230	230	230	220	210	210	200	200	p200c	...	...
30	...	...	230	220	220	210	200	220	210	210	230	...	...
31	...	...	240	230	220	210	210	200	210	190	190	...	...
MEAN*	...	233	229	223	217	214	213	214	216	213	219	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 98

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1939

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION. EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.7	1.1	1.5	1.2
2	0.9	1.6	2.1	1.9	1.8	1.7	2.0	1.8	1.7	1.6	0.6	0.8	1.0
3	1.1	1.7	1.7	1.7	p1.9b	1.9	1.8	1.8	1.7	1.7	0.8	0.8	1.0
4	1.5	0.8	1.2	1.7	1.7	1.7	1.7	1.8	1.7	1.1	0.9	0.8	0.9
5	0.8	0.8	1.1	1.4	1.6	1.7	1.8	1.8	1.7	1.6	1.6	0.8	1.3
6	0.8	1.5	1.1	1.4	1.7	1.7	1.4	1.7	1.7	1.0	1.1	0.8	1.1
7	0.8	0.8	1.1	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.2	3.0
8	...c	...c	...c	...c	...c	1.5	1.5	p1.7c	1.7	1.7	1.1	0.8	1.0
9	0.6	0.8	1.1	1.7	1.7	1.8	1.8	1.8	1.7	1.7	0.8	0.8	1.0
10	1.1	0.8	1.1	1.7	1.8	1.3	1.8	1.7	1.7	1.7	1.1	0.8	1.0
11	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	0.8
12	0.8	1.3	1.2	1.4	1.8	1.8	1.8	1.8	1.7	1.8	1.2	1.2	1.8
13	0.5	1.0	1.7	1.2	2.0	2.0	2.1	2.0	2.0	1.8	1.1	0.6	0.9
14	1.0	1.1	1.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
15	p0.9c	p1.0c	1.0	1.1	1.2	1.3	1.8	1.8	1.8	1.3	1.1	0.8	0.7
16	0.5	0.8	1.0	1.2	1.7	1.8	1.8	1.9	1.9	1.3	1.1	0.9	0.8
17	0.6	0.7	1.1	1.3	1.8	1.8	1.9	1.8	1.4	1.2	1.1	0.8	0.8
18	0.6	0.8	1.0	1.1	1.2	1.4	1.4	1.8	1.4	1.1	1.1	0.8	0.8
19	0.5	0.7	1.0	1.0	1.1	1.1	1.8	1.8	1.3	1.1	1.1	0.8	0.7
20	0.7	1.0	1.0	1.2	1.2	1.4	1.8	1.8	1.8	1.1	1.2	0.7	0.7
21	0.8	0.8	1.1	1.1	1.2	1.8	1.7	1.4	1.8	1.8	1.1	0.8	0.7
22	0.6	0.8	0.8	1.2	1.2	1.6	1.4	1.7	1.8	1.3	1.1	0.8	0.7
23	0.8	0.9	1.1	1.2	1.3	1.8	1.3	1.8	1.8	1.4	1.0	1.6	0.7
24	0.6	0.8	0.8	1.1	1.3	1.4	1.8	1.4	1.3	1.2	1.0	0.8	0.8
25	0.7	0.8	0.8	1.1	1.3	1.9	1.8	1.6	1.7	1.1	0.8	0.8	0.8
26	0.7	1.0	1.0	1.4	p1.6c	1.8	1.8	1.9	1.9	1.7	1.1	0.7	0.6
27	0.8	0.8	1.0	1.1	1.1	1.2	1.8	1.3	1.8	1.1	1.0	1.0	0.7
28	0.6	0.8	1.0	1.1	1.2	1.3	1.3	1.3	1.3	1.1	0.9	0.8	0.6
29	0.5	1.0	1.1	1.1	1.2	1.3	1.4	1.4	1.3	1.0	p0.9c	0.8	0.6
30	0.6	0.8	0.9	1.1	1.2	1.3	1.2	1.1	1.1	1.2	1.0	0.8	0.8
31	0.6	0.8	0.9	1.0	1.0	1.2	1.1	1.3	1.8	1.1	0.8	0.6	0.6
* MEAN	0.8	1.0	1.1	1.3	1.5	1.6	1.6	1.7	1.6	1.4	1.1	0.9	0.9

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2.4	3.0	3.4	3.8	3.9	4.0	4.0	4.0	3.7	3.4	3.0	2.5	1.6
2	2.2	3.0	3.5	3.6	4.0	4.2	4.0	3.9	3.7	3.4	2.8	2.5	1.6
3	2.3	2.8	3.2	4.1	p4.0b	4.0	4.0	3.9	3.9	3.5	3.0	2.5	1.6
4	2.4	2.9	3.3	3.6	3.8	3.9	3.8	3.9	3.6	3.4	2.9	2.6	1.6
5	2.4	1.8	3.4	3.8	3.8	3.9	4.4	3.9	3.7	p3.4	2.9	2.5	1.6
6	2.2	2.5	3.4	3.5	3.7	3.8	3.8	3.8	3.6	3.4	2.9	1.7	1.6
7	2.1	2.4	3.2	3.5	3.8	3.9	3.8	3.9	3.6	3.4	2.2	2.4	3.3
8	...c	...c	...c	...c	3.8	3.8	3.8	3.8	3.6	3.4	2.7	2.5	1.6
9	2.2	2.8	3.3	3.6	3.8	3.9	4.0	3.9	3.8	3.4	2.8	2.6	1.6
10	2.2	2.9	3.3	3.6	3.8	4.0	4.0	3.9	3.7	3.4	3.2	2.7	1.7
11	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.6
12	2.2	2.7	3.5	3.7	3.9	4.0	4.1	4.1	3.9	3.4	2.9	2.5	1.8
13	2.2	2.6	3.6	3.6	3.8	4.0	4.1	4.0	3.9	3.7	2.8	2.6	1.8
14	2.2	2.2	3.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
15	p2.2c	p2.8c	3.4	3.7	3.9	4.0	4.0	4.3	3.8	3.5	3.0	2.8	1.7
16	2.2	2.9	3.4	3.6	4.0	4.0	4.0	4.0	3.9	3.5	2.7	2.6	1.7
17	2.2	2.7	3.4	p3.8b	3.8	4.0	4.0	3.9	3.8	3.5	2.9	1.8	1.7
18	2.1	2.8	3.3	4.2	3.9	4.0	4.0	4.6	3.8	4.1	3.9	2.6	1.8
19	2.1	2.7	3.3	3.7	3.8	4.0	4.2	p4.0	3.8	3.5	3.2	2.5	1.8
20	2.1	3.0	3.3	3.6	3.9	4.0	4.0	3.9	3.7	3.4	2.8	2.7	1.8
21	2.2	2.9	3.1	3.5	3.8	3.9	4.1	3.8	3.7	3.6	2.7	2.7	1.8
22	2.1	2.8	4.2	3.5	3.8	4.2	4.3	3.9	3.7	3.5	3.0	2.6	1.7
23	2.1	2.8	3.3	3.6	3.9	4.1	4.0	3.8	4.2	3.4	3.0	2.6	1.7
24	0.9	2.8	3.2	3.5	3.8	3.9	3.8	3.8	3.6	3.5	3.1	2.6	1.8
25	2.0	2.8	3.3	3.7	3.8	3.9	4.2	4.3	4.2	3.4	2.8	2.6	1.8
26	2.0	2.7	3.2	3.6	p3.8c	4.1	3.9	3.9	3.7	3.4	3.0	2.6	1.7
27	2.1	2.7	3.1	3.4	3.6	3.8	3.8	3.7	3.6	3.4	3.0	2.7	1.8
28	2.0	2.8	3.0	3.5	3.7	3.8	3.9	3.7	3.7	2.3	2.7	2.5	1.7
29	2.0	2.7	2.8	3.5	3.7	3.8	3.8	3.8	3.7	3.7	p3.2c	2.8	0.7
30	2.0	2.7	3.3	3.5	3.6	3.7	3.9	3.8	3.7	3.4	3.0	2.6	1.7
31	1.2	p2.7	3.0	3.4	3.7	3.8	3.8	3.8	3.6	3.1	3.1	2.5	1.7
* MEAN	2.1	2.7	3.3	3.6	3.8	3.9	4.0	3.9	3.8	3.4	2.9	2.5	1.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 99

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1940

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	3.9	3.5	p3.3f	3.2f	3.4	3.5	6.3	8.3	9.4	9.7	7.6	7.2	7.3	7.4	7.9	8.4	8.9	9.8	10.2	9.9	7.7	7.0	6.6	6.5	7.0
2	5.5	4.5	3.7	p3.5f	p3.6f	p3.7f	6.5	8.5	9.7	10.0	10.4	10.7	9.6	8.9	9.3	9.8	10.7	11.0	11.5	10.6	9.0	7.0	p6.6f	p6.2f	7.9
3	p5.3f	4.2	7.1	p6.2f	p5.8f	p5.0f	6.0	8.6	10.3	10.8	9.7	6.6	8.2	10.0	10.5	10.3	10.5	11.0	11.5	12.4	12.0	11.1	10.9	9.2	8.9
4	7.8	6.9	6.6	5.8	4.8	4.1	6.8	9.3	10.1	10.8	10.8	9.4	9.7	11.0	11.1	10.5	11.0	11.5	12.5	11.8	10.6	9.0	p8.3f	p7.5f	9.1
5	p6.8f	6.1	5.8	p4.9f	p4.1f	4.6	5.6	8.4	10.2	p11.0	p10.8	10.6	11.0	11.3	11.5	11.6	11.9	11.7	12.0	12.0	11.4	9.9	p8.7f	p7.9f	9.2
6	p7.0f	6.1	5.0	p4.3f	p2.9f	p2.2f	5.3	8.3	10.4	11.0	11.1	11.5	11.8	12.0	12.4	12.9	12.8	12.6	12.4	12.0	10.5	10.3	9.7	p9.0f	9.3
7	p8.3f	p7.5f	6.6	5.2	4.5	3.0	6.1	8.5	10.2	10.6	10.1	9.6	9.9	10.7	11.6	12.0	11.7	12.0	12.0	11.6	10.8	9.4	8.8	7.4	9.1
8	5.9	...f	...f	...f	...f	...f	5.5	7.5	8.0	8.0	7.9	8.1	8.7	9.6	10.9	11.3	12.0	11.4	11.9	11.7	9.9	9.9	10.5	9.0	...
9	7.5	6.1	5.2	4.3	2.9	2.2	5.9	9.4	10.7	9.5	7.9	7.7	8.0	p10.4	11.3	11.2	11.7	11.6	11.0	10.5	9.0	7.4	8.1	p7.5f	8.2
10	p7.0f	6.4	p5.5f	4.5	3.5	2.7	6.9	9.1	10.0	8.2	7.6	8.8	10.0	11.2	12.2	12.0	11.5	11.0	11.2	11.0	10.3	10.5	9.8	7.9	8.7
11	6.6	5.5	5.3	4.6	3.3	2.7	6.4	8.9	10.0	9.4	8.0	8.0	8.0	9.2	9.3	10.0	11.2	11.7	11.5	11.5	11.3	10.8	9.9	9.8	8.5
12	8.2	7.2	p6.7f	p6.2f	p5.7f	5.2	7.3	10.1	10.8	10.1	8.4	9.0	9.2	9.4	10.4	11.5	12.2	11.8	12.0	12.0	11.8	10.9	9.6	8.0	9.3
13	6.4	5.8	5.6	4.4	3.1	2.8	6.3	p9.0c	9.5	7.7	7.6	7.8	8.6	8.6	9.2	10.2	10.9	11.0	10.9	10.5	9.2	7.8	p8.2f	p8.5f	7.9
14	8.8	5.5	4.4	2.9	1.9	2.0	6.0	8.1	9.6	10.0	8.0	7.9	8.0	8.2	8.6	9.6	10.0	10.4	10.9	10.1	8.0	6.6	7.9	p7.9f	7.6
15	8.0	4.5	3.8	3.1	2.8	2.8	6.2	9.0	10.3	10.2	9.3	8.8	9.4	9.7	10.1	10.1	10.6	11.5	11.5	11.6	11.3	p8.8f	p6.6f	5.4	8.1
16	5.3	5.1	4.0	2.8	2.7	3.4	6.6	9.4	10.3	p10.6c	11.5	10.8	9.4	10.0	10.4	11.2	11.7	11.6	11.5	11.1	11.0	9.9	7.9	7.8	8.6
17	7.7	6.1	4.8	4.5	4.5	p3.9f	5.4	8.5	9.8	9.6	9.3	10.0	10.2	9.0	9.2	9.4	10.1	10.7	10.1	9.1	7.6	8.7	8.6	8.2	8.1
18	7.9	6.6	5.7	4.9	5.0	4.6	6.6	9.0	10.3	11.0	10.5	7.9	8.5	8.3	9.0	10.8	11.2	11.1	12.0	12.0	10.9	9.7	9.9	9.0	8.8
19	8.2	6.5	p6.0f	5.4	4.2	3.9	6.6	9.0	10.5	11.3	11.3	11.3	10.8	10.0	9.8	9.6	9.2	9.1	9.0	8.3	7.0	6.5	p6.3f	p6.1f	8.2
20	6.0	5.4	5.2	5.7	4.8	4.8	6.4	9.1	10.4	10.7	10.7	10.1	9.6	9.9	10.0	10.0	10.2	10.4	10.9	11.0	10.4	10.7	11.0	10.1	8.9
21	8.1	6.8	6.6	5.5	4.1	3.6	6.5	8.7	10.1	11.0	11.1	11.5	12.3	11.1	10.5	11.1	11.4	12.0	12.8	11.6	10.6	9.9	9.5	8.9	9.4
22	7.3	5.9	5.5	4.8	4.1	4.3	6.0	8.5	9.6	9.7	9.5	8.8	8.8	9.0	9.1	10.0	10.8	11.6	12.0	10.8	9.0	p9.0f	p8.5f	p7.5f	8.3
23	6.8	5.9	5.0	5.5	4.6	4.1	6.2	8.5	9.7	11.0	10.9	10.2	9.9	10.5	9.5	9.2	9.5	10.0	10.9	10.6	9.6	9.7	8.4	7.7	8.5
24	6.8	7.3	6.9	6.4	6.4	5.3	6.7	8.7	9.7	10.3	11.7	11.5	12.0	12.0	12.0	11.6	11.8	11.5	12.2	10.5	10.3	9.7	p8.5f	p7.0f	9.4
25	5.2	...f	...f	...f	...f	...f	4.9	7.8	8.5	8.4	8.5	8.6	9.0	10.6	11.3	11.7	12.0	12.4	11.7	10.4	7.4	p6.8f	p5.5f	4.8	...
26	4.6	p4.8f	5.0	4.8	3.7	3.2	5.6	4.8	9.7	10.0	8.2	8.0	8.1	9.6	10.6	10.8	11.4	11.3	11.2	10.5	8.3	...f	...f	...f	...
27	...f	...f	...f	...f	...f	4.1	5.4	8.3	9.8	10.5	10.0	7.8	8.0	9.1	10.2	10.7	10.2	11.2	10.8	10.6	10.3	8.8	6.8	5.1	...
28	3.5	2.5	2.1	1.5	p1.5f	p1.5f	4.7	7.8	9.4	9.8	8.7	7.9	8.0	7.9	8.0	8.6	9.2	9.5	9.9	9.8	8.5	7.4	6.9	7.0	6.7
29	6.3	5.2	4.2	4.0	3.2	3.1	6.1	8.4	9.4	10.1	10.1	9.5	8.7	8.5	9.3	10.0	10.5	10.4	10.0	9.9	9.3	8.4	8.1	8.2	8.0
30	8.0	6.2	4.1	3.5	2.8	p3.8f	5.2	8.5	9.6	10.1	10.8	10.1	8.8	8.8	8.6	8.3	8.1	8.4	9.0	9.5	8.7	p7.7f	6.6	6.7	7.6
31	7.7	6.2	5.5	5.4	p5.3f	p5.2f	5.1	7.9	9.7	11.3	12.2	12.6	9.4	9.1	8.7	8.3	7.9	8.6	9.3	8.6	p8.3f	p8.0f	p7.7f	7.4	8.1
MEAN*	6.8	5.7	5.2	4.6	3.9	3.6	6.0	8.5	9.8	10.1	9.7	9.3	9.3	9.7	10.1	10.4	10.7	11.0	11.2	10.8	9.7	8.9	8.4	7.6	8.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1940

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	420	400	400	380	350	290	270	240	320	350	450	460	430	410	400	360	360	250	300	320	330	390	390	310	358
2	240	230	300	310	330	300	260	280	310	340	380	380	400	400	400	350	320	250	280	300	340	430	440	400	332
3	390	370	350	370	360	340	270	230	230	350	470	350	320	360	360	310	290	260	260	280	300	290	290	320	322
4	320	340	310	250	240	250	270	260	290	330	340	340	330	360	330	290	280	250	270	280	360	330	330	360	305
5	350	410	400	330	280	250	270	240	310	q340	q370	360	380	360	350	280	280	250	270	300	330	390	390	350	327
6	330	410	360	350	320	330	280	230	280	320	330	q360	360	330	310	300	340	260	270	300	300	320	310	340	318
7	350	290	240	240	250	270	260	260	320	430	370	330	350	360	340	330	330	260	270	280	280	330	350	380	311
8	400	410	420	370	270	280	270	240	260	380	400	400	390	q380b	q370b	360	300	250	270	300	260	330	290	260	328
9	260	270	250	230	240	260	260	240	310	310	390	390	390	q370	350	350	320	240	260	300	330	290	330	330	303
10	260	240	240	230	230	230	260	240	290	350	300	380	360	340	340	310	320	250	260	290	280	250	230	240	280
11	270	240	260	230	230	220	250	230	300	310	390	370	400	420	330	290	290	240	260	290	310	280	250	250	288
12	230	260	290	250	220	230	220	220	250	310	390	350	q360b	350	320	280	290	240	270	230	320	250	250	250	276
13	280	290	260	250	260	260	260	q240c	300	310	390	370	400	340	370	360	330	250	270	300	330	300	310	310	306
14	260	240	230	240	250	430	250	240	280	350	360	410	380	400	340	340	320	240	270	310	380	430	370	340	319
15	270	260	260	260	250	270	260	240	300	330	350	430	400	350	390	340	250	250	280	310	360	390	400	430	318
16	350	300	250	250	260	290	270	240	280	q320	350	390	380	360	410	260	330	260	310	290	310	300	300	330	308
17	280	240	250	250	260	240	280	240	300	340	360	360	330	350	390	350	320	250	280	330	330	330	310	280	302
18	230	250	250	250	250	250	270	240	300	330	380	360	400	390	350	370	360	260	270	270	240	230	260	300	294
19	310	300	260	260	250	260	260	240	300	330	350	330	360	360	330	360	290	250	280	320	360	390	220	190	298
20	200	190	190	240	250	250	260	240	300	340	370	350	380	400	390	350	310	260	280	250	320	300	260	230	288
21	250	270	260	250	250	240	270	230	290	320	330	360	380	360	360	280	260	250	260	280	330	310	250	230	286
22	210	260	260	280	300	270	260	250	320	360	400	380	400	370	360	350	350	250	260	300	360	410	360	350	320
23	270	240	230	250	270	260	250	240	290	320	340	380	400	370	320	300	320	240	270	290	300	330	300	260	293
24	230	260	280	300	280	250	260	270	290	310	340	330	360	340	360	370	330	260	270	300	330	300	330	390	306
25	340	330	300	380	350	310	280	260	300	310	380	340	360	350	q350	360	330	250	280	320	390	430	410	350	336
26	280	240	250	230	240	230	260	230	280	300	350	390	350	360	330	320	340	260	280	300	280	350	400	410	302
27	380	350	310	310	300	200	270	230	280	320	390	420	390	390	360	350	330	250	230	300	250	250	240	230	305
28	230	200	200	260	330	430	280	230	300	330	380	380	420	390	370	320	290	230	270	300	310	340	320	290	308
29	230	240	230	260	240	220	270	240	300	320	340	370	380	340	370	350	360	260	280	300	300	340	300	220	294
30	220	220	240	250	270	270	270	240	270	320	340	340	400	400	340	320	320	240	270	300	340	370	340	290	299
31	250	250	300	310	370	410	270	250	300	300	360	370	350	330	320	320	300	240	270	340	360	380	220	270	310
* MEAN	287	284	279	278	276	277	264	242	292	332	369	372	377	367	355	328	315	250	272	296	320	334	315	306	308

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 101

JANUARY 1940 | JANUARY 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.7	5.0	5.0	5.0	5.0	5.0	4.9	4.7	4.8	...	...
2	...	...	4.7	5.2	5.2	5.0	5.1	5.0	5.2	4.6	4.7	...	...
3	...	...	4.8	5.0	5.0	5.0	4.9	4.9	5.2	4.8	4.5	...	...
4	...	...	4.9	5.2	4.9	5.1	5.0	5.1	5.0	4.4	4.3	...	...
5	...	...	4.7	p5.0	p5.1	5.2	5.3	5.2	5.1	4.8	4.3	...	...
6	...	...	4.3	5.1	4.9	p5.1	5.2	4.9	4.9	4.6	4.2	...	...
7	...	...	5.1	5.0	5.2	5.3	5.0	5.1	5.0	4.4	4.3	...	...
8	...	...	4.3	5.2	5.2	5.3	5.0	p5.0b	p5.0b	4.6	4.4	...	...
9	...	...	4.9	4.8	5.1	5.0	5.1	p5.0	4.8	4.6	4.5	...	...
10	...	...	4.5	5.0	4.8	5.1	5.1	5.0	5.0	5.0	5.2	...	...
11	...	...	4.7	5.0	5.3	5.2	5.3	5.3	4.8	4.7	4.4	...	...
12	...	...	4.3	4.7	5.2	5.1	p5.2b	4.8	4.8	4.5	4.4	...	...
13	...	...	4.5	4.9	5.0	5.0	5.2	5.0	5.0	5.0	4.4	...	...
14	...	...	4.5	5.0	5.1	5.1	5.0	5.1	4.8	4.5	4.4	...	...
15	...	...	4.7	5.0	5.1	5.1	5.2	5.0	4.8	4.6	4.0	...	...
16	...	...	4.5	p4.9c	5.1	5.3	5.0	5.1	4.7	4.3	4.5	...	...
17	...	...	4.8	5.0	5.3	5.2	5.0	5.0	5.2	4.9	4.8	...	...
18	...	...	4.9	5.2	5.0	5.0	5.1	5.2	4.8	4.6	4.5	...	...
19	...	...	4.9	5.0	5.2	5.2	5.4	5.2	4.8	5.0	4.3	...	...
20	...	...	5.0	4.9	5.2	5.2	5.2	5.2	5.2	4.8	4.6	...	...
21	...	...	5.0	5.0	5.1	5.1	5.1	4.9	4.7	4.2	4.0	...	...
22	...	...	5.0	5.0	5.2	5.0	5.1	4.9	4.7	4.7	5.2	...	...
23	...	...	4.7	5.0	4.9	5.1	5.2	4.9	4.6	4.4	4.5	...	...
24	...	...	4.4	4.8	4.9	4.9	5.0	5.1	4.8	4.6	4.0	...	...
25	...	...	4.5	4.8	4.9	4.9	5.0	4.9	p4.9	4.9	4.8	...	...
26	...	...	4.8	4.8	5.1	5.2	5.0	4.9	4.7	4.8	4.7	...	...
27	...	...	4.5	4.9	4.8	5.0	5.0	5.0	4.8	4.9	4.5	...	...
28	...	...	4.7	5.0	4.9	5.0	5.0	4.9	4.8	4.6	4.4	...	...
29	...	...	4.6	4.9	4.8	5.0	5.0	4.8	5.0	4.8	4.8	...	...
30	...	...	4.4	4.7	4.8	4.9	5.0	5.0	4.7	4.7	4.6	...	...
31	...	...	4.8	4.8	5.0	5.0	4.9	4.8	4.8	4.5	4.5	...	...
* MEAN	...	...	4.7	5.0	5.0	5.1	5.1	5.0	4.9	4.7	4.5	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	220	200	200	190	200	210	220	...	...
2	...	...	230	230	230	210	210	200	210	210	190	...	...
3	...	...	p230	220	220	200	210	210	230	240	260	...	...
4	...	...	240	230	230	230	220	220	p220b	210	230	...	...
5	...	...	230	p230	p220	220	220	210	220	210	220	...	...
6	...	...	230	240	230	p240b	230	200	200	200	220	...	...
7	...	...	230	240	220	p210b	220	215	210	190	200	...	...
8	...	...	230	220	220	210	220	p220b	p220b	240	210	...	...
9	...	...	240	220	220	p220	220	p220	210	200	210	...	...
10	...	...	220	220	210	200	210	190	200	230	240	...	...
11	...	...	220	220	210	210	190	190	200	230	230	...	...
12	...	...	210	200	200	210	p190b	190	190	180	220	...	...
13	...	...	220	210	200	200	190	200	200	190	230	...	...
14	...	...	230	210	200	200	200	210	190	190	220	...	...
15	...	...	240	220	210	220	210	200	200	200	240	...	...
16	...	...	240	p220c	210	200	190	200	190	210	230	...	...
17	...	...	230	220	210	230	220	200	200	210	220	...	...
18	...	...	220	220	220	210	220	210	200	190	250	...	...
19	...	...	240	230	220	210	210	200	200	180	200	...	...
20	...	...	230	230	230	220	210	210	200	210	200	...	...
21	...	...	240	220	210	210	210	210	200	180	240	...	...
22	...	...	230	220	230	220	210	200	180	190	180	...	...
23	...	...	230	220	210	220	210	210	200	190	220	...	...
24	...	...	240	220	220	220	230	220	220	250	230	...	...
25	...	...	240	240	230	220	230	220	230	230	210	...	...
26	...	...	220	210	210	220	230	220	210	180	210	...	...
27	...	...	220	210	200	200	200	200	200	210	190	...	...
28	...	...	220	220	210	200	210	220	210	220	220	...	...
29	...	...	230	220	210	200	200	200	200	210	220	...	...
30	...	...	230	230	220	210	210	200	210	200	200	...	...
31	...	...	240	200	220	210	210	210	200	200	210	...	...
* MEAN	...	...	230	221	216	212	211	206	205	206	218	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 102

JANUARY 1940 | JANUARY 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.8	0.7	1.0	1.1	1.3	1.3	1.2	1.2	1.1	1.0	0.8	0.6	1.2	2.6	3.4	3.3	3.5	3.7	3.8	3.7	3.5	3.4	3.0	2.5	3.4
2	0.7	0.6	0.9	1.1	1.1	1.3	1.2	1.2	1.2	1.1	1.1	0.7	0.7	2.2	2.7	2.9	3.4	3.7	3.8	3.9	3.8	3.7	3.5	3.2	2.5	2.0
3	0.6	0.7	0.8	1.0	1.1	1.9	1.9	1.8	1.1	1.1	0.9	0.8	0.6	1.8	1.7	2.7	3.4	3.6	3.7	3.8	3.9	3.7	3.4	2.7	2.5	1.8
4	0.7	1.0	1.1	2.2	2.7	p3.5b	p3.5b	1.9	p2.2b	1.8	1.0	1.1	0.6	2.1	2.9	3.3	3.8	4.0	4.2	p4.3b	4.0	p3.8b	3.6	3.0	2.8	1.9
5	0.6	0.8	1.0	p1.2	p1.3	1.9	2.0	2.0	1.9	2.0	1.2	0.7	0.6	2.0	2.8	3.2	p3.8	p4.0	3.9	4.0	3.9	3.7	3.5	3.1	2.6	1.8
6	0.7	0.8	1.0	1.4	1.9	p2.3b	2.1	1.9	1.8	1.2	1.1	0.8	0.7	2.0	2.7	3.2	4.0	4.0	p5.3b	4.3	3.8	3.8	3.4	3.3	2.7	1.8
7	1.8	1.9	1.4	2.1	1.4	p1.8b	2.1	2.0	1.8	1.1	0.7	0.8	0.6	2.1	2.9	3.2	3.8	3.8	p4.9b	4.1	3.9	3.8	3.5	3.1	2.5	2.0
8	0.6	0.8	1.1	1.7	1.3	1.8	1.8	p1.9b	p2.0b	1.7	1.0	0.8	0.6	2.0	2.7	3.2	3.5	3.7	3.8	3.9	p3.8b	p3.7b	3.5	2.3	2.7	1.8
9	0.8	0.7	1.4	2.0	p2.7	2.4	2.5	2.5	2.2	1.8	1.1	0.8	0.6	2.0	2.7	3.4	3.5	p4.0	p4.1	4.2	p4.0	3.9	3.4	3.1	2.8	1.8
10	0.6	0.7	1.0	1.1	1.7	1.8	1.8	1.9	1.7	1.1	1.0	0.6	0.6	1.9	2.5	2.8	3.5	3.7	3.8	4.0	3.9	3.6	3.5	3.2	2.8	1.9
11	0.6	0.7	1.0	1.1	1.1	1.7	1.4	1.4	1.8	1.8	1.1	0.8	0.6	2.0	2.7	3.1	3.4	3.6	3.7	3.8	3.7	3.6	3.5	2.9	2.6	1.6
12	0.6	0.8	1.0	1.1	1.3	1.7	p1.8b	1.9	1.7	1.2	1.1	0.8	0.6	1.8	2.4	2.7	3.3	3.5	3.7	p3.8b	3.8	3.7	3.3	2.8	2.6	1.8
13	0.8	1.5	1.0	1.0	1.2	1.1	1.2	1.2	1.2	1.2	1.1	1.0	0.8	1.8	2.4	2.8	3.3	3.6	3.8	3.8	3.8	3.5	3.3	3.1	2.7	1.8
14	0.6	0.8	0.9	1.0	1.1	1.8	1.2	1.2	1.0	1.8	1.0	0.8	0.6	1.8	2.6	2.8	3.4	3.6	3.8	3.9	3.8	3.6	3.4	3.2	2.8	1.9
15	0.6	0.8	1.0	1.2	1.2	1.7	2.0	2.0	1.2	1.4	1.1	0.8	0.8	1.9	2.7	3.0	3.5	3.6	3.9	4.0	3.8	3.9	3.2	3.7	2.8	2.2
16	0.8	1.0	1.2	p1.3c	1.9	1.8	1.9	1.8	1.8	1.8	1.2	0.8	0.8	1.8	2.8	3.0	p3.5c	3.9	3.9	4.0	3.9	3.8	3.6	3.3	2.7	p4.0
17	0.6	0.8	0.9	1.1	1.8	1.8	1.8	1.8	1.7	1.7	1.2	0.8	0.8	2.1	2.5	3.0	3.5	3.7	3.9	3.9	3.9	3.8	3.5	3.1	2.7	1.9
18	0.6	0.8	0.8	1.1	1.1	1.2	1.4	1.7	1.7	1.7	1.7	0.9	0.8	1.8	2.7	3.1	3.4	3.6	3.8	4.0	3.9	3.6	3.4	3.3	2.7	1.9
19	0.8	0.8	0.8	1.0	1.1	1.8	1.7	1.8	1.8	1.2	1.1	0.8	0.7	1.9	2.8	3.1	3.5	3.8	3.9	3.9	3.8	3.6	3.6	3.0	2.8	1.9
20	0.5	0.8	0.8	1.2	1.2	1.8	1.4	1.8	1.7	1.2	1.0	0.8	0.6	1.9	2.7	3.1	3.5	3.6	3.8	3.8	3.8	3.7	3.4	3.1	2.8	1.8
21	0.6	0.8	1.8	1.7	1.8	1.4	1.8	1.7	1.8	1.7	1.1	1.0	1.1	1.9	2.7	3.8	3.5	3.7	3.9	3.9	3.8	3.7	4.1	3.5	2.8	1.8
22	0.8	0.8	1.0	1.1	1.3	1.7	1.7	1.8	1.4	1.2	1.0	0.8	0.6	1.8	2.7	2.4	3.4	3.6	3.8	3.8	3.8	3.8	3.6	3.0	2.7	1.8
23	0.8	0.8	1.1	1.1	1.7	1.7	1.8	1.8	1.1	1.0	1.2	1.0	1.8	1.8	2.7	3.0	3.5	3.6	3.8	3.8	3.7	3.7	3.4	3.1	2.7	1.9
24	0.8	0.8	0.8	1.1	1.4	1.8	2.0	1.8	1.7	1.8	1.7	0.8	0.6	1.8	2.5	3.2	3.6	3.7	3.8	3.8	4.0	3.7	3.8	3.4	2.8	1.9
25	0.8	0.8	1.1	1.3	2.1	2.2	2.5	2.6	2.2	1.9	1.2	1.1	0.9	1.8	2.7	2.9	3.5	3.9	4.0	4.0	4.0	4.1	3.8	3.0	2.9	1.9
26	0.8	0.8	1.0	1.1	1.1	1.4	1.8	1.8	2.0	1.8	1.7	0.9	0.8	1.8	2.7	2.9	3.5	3.7	3.5	3.5	3.5	3.8	3.5	3.2	2.7	1.8
27	0.8	0.8	1.0	1.2	1.2	1.4	1.8	2.0	1.9	2.0	1.2	0.9	0.8	1.8	2.6	3.1	3.4	3.6	3.6	3.8	3.5	3.8	3.7	3.0	2.7	2.1
28	0.6	0.7	0.9	1.1	1.1	1.7	1.7	1.7	1.8	1.4	1.2	1.1	0.8	1.7	2.5	2.7	3.5	3.5	3.5	3.9	3.6	3.8	3.5	3.0	2.6	1.8
29	0.5	0.8	1.0	1.1	1.2	1.7	1.7	1.8	1.8	1.8	1.2	1.0	0.9	2.0	2.6	3.1	3.4	3.7	3.7	3.5	3.5	3.7	3.5	3.1	2.7	1.8
30	0.8	0.8	0.8	1.3	1.1	1.4	1.7	1.3	1.8	1.4	1.0	0.8	0.8	1.7	2.6	3.1	3.5	3.5	3.5	3.8	3.5	3.6	3.4	3.1	2.6	1.8
31	0.8	1.0	1.0	1.1	1.2	1.2	1.8	1.8	1.4	1.4	1.0	1.0	0.8	1.7	2.6	3.1	2.2	3.8	3.9	3.8	3.8	3.6	3.5	3.5	2.7	1.9
* MEAN	0.7	0.8	1.0	1.3	1.4	1.7	1.8	1.8	1.7	1.5	1.1	0.9	0.8	1.9	2.6	3.0	3.5	3.7	3.9	3.9	3.8	3.7	3.5	3.1	2.7	2.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 103

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1940 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND FEBRUARY 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.8	5.7	4.9	4.6	4.6	4.5	6.1	8.5	9.9	10.8	11.5	10.5	9.8	9.4	9.7	10.1	10.9	11.7	12.0	10.9	10.3	9.3	9.6	9.7	8.8
2	9.0	7.6	6.5	5.0	3.5	3.6	5.1	8.3	10.2	10.9	11.2	10.4	10.0	9.6	9.4	9.1	8.6	8.4	8.5	9.6	9.4	8.7	p7.8f	p6.9f	8.2
3	6.1	p6.0f	p6.0f	5.9	4.3	2.1	5.0	7.7	9.6	10.5	10.2	9.8	10.3	10.8	11.5	11.8	12.0	12.0	12.6	12.5	12.0	11.0	10.8	9.9	9.2
4	9.0	7.4	4.9	3.2	2.4	1.9	4.8	7.9	9.8	10.0	9.4	8.4	8.5	9.0	10.1	11.4	11.4	11.4	11.0	10.7	9.7	9.1	8.8	p8.6f	8.3
5	p7.2f	p6.0f	4.7	3.6	3.1	2.1	4.8	7.9	9.5	10.1	8.8	8.8	9.1	9.8	10.4	10.7	10.9	11.7	12.0	12.0	11.3	10.6	10.3	8.7	8.5
6	7.2	5.2	3.5	2.5	1.9	1.8	5.0	8.2	9.6	10.4	11.1	10.5	10.1	10.2	11.0	11.5	12.8	12.8	12.8	11.8	...f	...f	...f	...f	...
7	...f	6.7	4.7	3.3	2.8	2.4	5.2	8.2	9.6	9.2	8.8	8.9	9.8	10.9	11.6	12.0	12.2	12.8	12.8	12.1	11.3	10.1	p9.8f	p9.6f	...
8	p8.0f	6.6	5.8	5.0	4.6	3.4	5.2	8.4	10.0	10.5	8.9	8.9	9.4	10.0	11.3	12.0	12.5	12.9	12.6	12.6	11.2	p10.3f	9.3	9.1	9.1
9	8.3	6.8	5.4	5.1	5.2	4.8	6.0	9.5	11.3	12.0	12.2	12.3	11.5	12.0	12.6	12.6	13.0	13.0	13.2	12.9	12.0	10.9	p10.6f	p10.4f	10.2
10	p9.0f	7.3	4.8	3.2	2.2	1.6	5.0	8.4	10.2	9.3	8.5	8.6	9.3	9.7	10.8	11.5	11.9	12.1	11.5	11.0	10.0	8.4	8.0	6.8	8.3
11	5.9	5.9	5.6	5.0	4.6	3.9	5.3	8.2	10.3	11.8	10.5	9.2	9.4	9.9	10.1	10.2	10.4	10.4	10.6	10.6	10.1	9.8	9.0	9.3	8.6
12	10.0	8.7	6.4	5.9	5.6	5.0	6.4	9.3	10.7	11.5	12.0	12.2	12.3	12.8	13.5	13.2	13.1	12.8	12.8	12.1	12.0	11.4	12.5	12.2	10.6
13	9.6	7.8	6.1	4.7	4.3	3.2	5.3	8.3	p9.5c	10.8	9.8	9.1	9.3	9.1	9.1	9.3	9.8	10.0	10.2	9.7	9.3	8.3	7.7	7.9	8.3
14	8.0	p7.5f	7.0	6.3	5.9	4.8	5.7	8.4	9.7	11.3	11.5	11.4	11.8	10.7	10.7	10.8	11.1	10.9	10.5	10.2	9.0	8.3	8.0	8.4	9.1
15	7.9	7.4	6.9	6.1	5.6	3.5	5.6	8.1	9.7	11.0	11.6	11.6	12.0	11.0	10.4	10.0	9.6	9.6	9.7	9.1	p8.5f	7.9	...f	...f	...
16	...f	...f	...f	7.2	6.8	6.2	7.3	9.7	10.6	11.8	12.2	11.8	10.2	9.8	9.9	9.6	9.3	9.2	9.2	9.3	9.2	9.6	9.3	9.4	...
17	9.3	9.0	7.8	6.7	5.8	4.9	5.8	8.7	10.5	11.4	12.6	11.6	9.7	9.3	9.5	10.2	10.5	10.6	10.6	10.3	9.3	9.5	10.0	10.2	...
18	10.1	9.6	6.9	5.3	3.7	2.8	5.1	8.1	10.1	11.2	11.7	11.1	10.6	10.3	10.3	10.0	10.2	10.2	9.7	9.2	8.5	...f	...f	...f	...
19	...f	...f	7.6	6.3	5.7	5.0	6.0	8.4	9.8	11.2	12.0	11.0	9.9	9.2	9.4	9.6	9.9	10.1	9.7	9.0	p9.0f	p9.0f	9.0	p8.5f	...
20	p8.2f	7.7	5.9	6.3	6.8	6.7	6.8	8.7	10.5	10.5	12.0	12.5	13.0	12.8	12.4	12.0	11.6	11.2	10.9	9.8	7.9	p8.6f	9.3	10.0	9.7
21	p9.0f	p8.0f	6.9	7.4	8.3	7.6	8.0	9.7	11.1	12.2	12.6	12.0	12.0	10.7	11.1	11.2	11.0	10.9	11.1	9.6	9.6	9.2	9.1	8.6	9.9
22	8.8	8.3	8.1	8.1	7.9	7.9	8.8	9.8	11.2	11.7	12.6	12.1	12.0	11.7	11.7	11.9	12.0	11.5	10.5	9.3	8.3	8.4	10.2	10.2	10.1
23	10.2	9.2	7.1	7.1	7.0	p6.8f	4.3	8.1	10.2	11.3	12.6	12.6	12.5	12.4	11.6	11.2	10.7	10.7	10.6	10.3	9.2	p8.6f	7.9	p8.2f	9.6
24	p8.4f	8.6	8.0	8.0	p7.0f	p6.0f	p5.0f	8.9	10.6	12.3	12.4	11.0	10.3	10.8	11.5	11.7	11.0	10.3	9.5	9.2	9.0	10.1	9.4	9.5	9.5
25	9.2	9.3	9.0	8.9	8.7	p6.5f	p5.0f	p10.4f	12.6	13.0	11.8	11.4	11.4	11.7	12.0	11.5	11.3	10.5	10.5	10.5	10.2	9.8	9.4	8.8	10.1
26	8.8	8.6	8.2	7.8	7.4	7.1	7.6	10.4	11.6	12.1	13.0	13.3	11.9	11.3	10.8	10.3	10.3	10.9	11.5	10.8	9.6	...f	...f	...f	...
27	...f	8.3	7.6	7.0	6.3	5.4	6.1	9.1	10.6	11.5	11.9	10.6	10.3	10.2	9.8	10.0	10.3	10.1	10.0	8.8	...f	...f	...f	...f	...
28	...f	8.2	7.1	5.5	4.5	4.1	5.5	8.3	10.0	11.1	11.6	11.1	9.9	9.4	9.4	9.4	9.4	9.7	9.9	9.4	8.6	7.6	7.8	8.7	...
29	9.4	8.6	6.7	6.0	5.9	5.5	6.1	9.1	11.1	12.0	12.5	12.2	9.9	9.7	9.8	9.7	9.6	9.2	9.3	9.2	8.1	p8.0f	p8.0f	p8.0f	8.9
30																									
31																									
MEAN*	8.5	7.6	6.4	5.8	5.3	4.5	5.8	8.7	10.4	11.2	11.3	10.9	10.6	10.5	10.7	10.8	10.9	11.0	10.9	10.4	9.7	9.3	9.2	9.1	9.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 104

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1940 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — FEBRUARY 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	240	240	250	260	260	290	270	250	280	330	300	360	380	380	340	290	260	250	280	310	330	250	290	240	289
2	250	240	210	230	260	250	260	250	290	310	330	350	370	360	320	300	300	300	270	300	280	310	370	280	291
3	310	260	230	230	210	250	270	350	280	320	340	350	360	320	310	300	320	230	270	290	310	310	310	320	294
4	270	230	230	240	250	240	270	210	300	320	340	350	400	350	320	300	290	250	270	310	310	340	320	310	292
5	280	250	240	230	240	230	260	240	280	280	310	340	350	350	350	320	320	230	260	260	270	260	250	220	276
6	220	230	240	250	270	260	250	230	280	300	320	340	350	320	320	310	300	230	270	320	320	300	330	280	285
7	230	220	230	230	230	240	240	230	260	270	350	320	340	320	320	300	280	230	260	290	330	330	290	260	275
8	260	200	200	220	220	220	260	230	260	320	300	280	330	320	320	280	280	230	270	300	270	350	290	280	270
9	260	230	240	260	240	230	260	220	280	280	300	310	300	300	290	290	290	230	260	290	310	320	350	310	277
10	230	190	210	240	270	270	250	220	290	320	320	300	320	340	300	310	310	240	260	290	300	300	330	340	281
11	300	300	300	300	300	240	250	230	280	300	310	320	350	350	320	290	280	240	270	290	280	290	280	260	289
12	240	210	260	270	250	230	250	230	260	280	320	330	320	300	320	260	290	240	250	270	280	270	280	270	270
13	250	230	230	250	240	240	260	290	q280c	280	320	300	340	320	300	270	260	230	250	310	330	360	330	320	283
14	260	240	250	240	230	220	250	230	280	290	290	310	350	320	300	290	260	240	260	300	330	320	330	310	279
15	250	240	230	210	240	260	230	280	280	300	310	300	320	310	320	300	270	220	260	320	330	270	300	300	277
16	270	240	260	250	240	230	260	240	250	290	300	320	350	340	350	300	270	230	260	300	320	270	250	230	276
17	210	210	230	220	230	230	250	240	270	260	300	310	320	360	320	290	290	230	260	300	340	290	270	290	272
18	260	210	220	220	230	240	270	230	270	300	310	330	360	350	310	280	250	220	260	300	340	350	240	240	275
19	240	230	230	220	230	230	260	240	280	300	330	330	330	340	300	310	300	220	270	310	270	280	210	260	272
20	230	230	230	270	290	260	270	240	290	290	320	300	350	320	310	290	290	220	260	330	330	330	240	260	281
21	280	270	280	270	240	230	250	230	260	280	310	310	330	310	300	290	290	220	260	280	230	290	230	210	269
22	230	240	260	260	270	280	270	230	280	290	290	300	330	310	300	300	300	230	260	320	330	290	240	240	277
23	230	210	230	260	290	280	260	240	270	280	300	300	300	290	310	300	300	230	260	290	280	270	240	220	268
24	200	230	250	260	300	270	270	230	270	280	300	310	310	300	300	280	300	240	260	300	300	270	270	200	271
25	270	250	280	300	300	260	270	240	270	270	290	320	300	270	300	260	280	240	270	280	280	290	270	280	277
26	250	200	230	260	260	240	260	230	260	290	290	300	300	320	280	280	280	230	250	270	310	300	200	230	263
27	210	220	240	240	220	210	240	230	270	280	300	300	330	300	280	250	250	230	270	300	400	330	260	260	268
28	220	210	230	240	230	230	250	230	280	290	290	320	340	330	320	330	280	230	250	320	320	330	300	230	275
29	210	210	240	240	240	250	260	240	280	290	300	330	300	320	300	270	260	230	26	300	310	330	280	220	270
30																									
31																									
MEAN*	247	230	240	247	251	245	258	241	275	293	310	319	335	325	311	291	285	234	263	298	308	304	281	265	277

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 105

FEBRUARY 1940 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — FEBRUARY 1940

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.4	5.0	5.0	5.1	5.1	5.1	4.9	4.9	3.9	...	...
2	...	...	4.7	4.9	5.0	5.1	5.2	5.0	4.7	4.5	4.5	...	...
3	...	...	4.5	5.0	4.9	5.1	4.9	4.8	4.8	4.9	4.9	...	...
4	...	...	4.8	5.0	4.9	5.0	5.2	4.9	5.0	4.6	4.5	...	...
5	...	...	4.6	4.9	4.9	5.2	5.2	5.0	4.8	4.3	4.5	...	...
6	...	...	4.5	5.0	5.0	5.0	5.0	4.9	4.9	4.7	4.5	...	...
7	...	...	4.5	4.5	5.2	5.0	5.2	5.0	4.8	4.8	4.5	...	...
8	...	...	4.4	5.0	5.1	5.1	5.1	5.1	5.0	4.8	4.6	...	...
9	...	...	4.6	4.8	5.1	5.1	5.2	5.2	5.0	4.5	4.3	...	...
10	...	...	4.7	5.0	5.0	5.1	5.2	5.1	5.0	4.7	4.4	...	...
11	...	...	4.8	5.0	5.0	5.1	5.3	5.3	5.2	4.8	4.6	...	...
12	...	...	4.5	4.9	5.0	5.2	5.0	4.8	4.8	4.4	4.6	...	...
13	...	...	p5.0c	5.0	5.0	5.2	5.2	5.0	4.8	4.8	4.4	...	...
14	...	...	4.8	5.0	4.8	5.0	5.3	5.0	4.9	4.8	4.3	...	...
15	...	...	4.8	5.1	5.3	5.2	5.3	5.2	5.0	5.0	4.4	...	...
16	...	...	4.5	5.0	4.8	5.1	5.2	5.2	5.2	4.9	4.2	...	...
17	...	...	4.8	4.7	5.1	5.2	5.2	5.3	5.2	4.8	4.8	...	...
18	...	...	4.6	4.8	4.9	5.1	5.2	5.2	5.0	4.8	4.3	...	...
19	...	...	5.0	5.0	5.0	5.2	5.2	5.2	5.0	5.0	5.0	...	...
20	...	...	5.0	5.0	5.3	5.0	5.2	5.1	4.9	4.8	4.6	...	...
21	...	...	4.8	4.9	5.1	5.2	5.3	5.0	4.8	4.8	4.8	...	...
22	...	...	5.0	5.2	5.3	5.1	5.5	5.0	5.2	4.9	4.8	...	...
23	...	...	4.8	5.1	5.3	5.4	5.2	5.2	5.0	5.0	5.0	...	...
24	...	...	5.0	5.2	5.1	5.2	5.1	5.3	5.2	4.3	4.7	...	...
25	...	...	5.0	4.8	5.0	5.0	5.1	4.8	4.8	4.5	4.5	...	...
26	...	...	4.8	5.0	5.1	5.1	5.0	5.1	4.8	4.8	4.8	...	...
27	...	...	4.8	5.0	5.2	5.1	5.2	5.0	4.8	4.7	4.2	...	...
28	...	...	4.8	4.6	5.0	5.0	5.2	5.1	5.0	5.0	4.5	...	...
29	...	...	4.8	5.0	5.2	5.2	5.0	5.2	4.8	4.6	4.4	...	...
30													
31													
MEAN*	...	...	4.7	5.0	5.1	5.1	5.2	5.1	4.9	4.8	4.5	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	230	220	230	220	220	210	210	200	...	...
2	...	...	240	220	220	210	220	210	200	200	190	...	...
3	...	...	240	230	230	210	220	200	200	220	200	...	...
4	...	...	230	210	210	210	200	200	200	220	220	...	...
5	...	...	230	200	200	200	200	190	190	200	220	...	...
6	...	...	210	210	200	200	200	200	200	200	210	...	...
7	...	...	210	200	210	200	200	200	190	p200b	220	...	...
8	...	...	190	200	200	200	200	210	210	200	220	...	...
9	...	...	220	210	210	200	200	200	190	190	210	...	...
10	...	...	210	200	200	200	190	190	190	210	220	...	...
11	...	...	200	210	200	200	210	200	200	190	210	...	...
12	...	...	220	210	200	180	200	200	200	200	220	...	...
13	...	...	p230c	220	210	200	200	200	200	210	210	...	...
14	...	...	230	210	200	200	200	190	190	190	200	...	...
15	...	...	230	220	210	200	200	210	200	220	210	...	...
16	...	...	220	220	210	210	210	210	210	210	210	...	...
17	...	...	220	220	220	210	210	210	220	210	210	...	...
18	...	...	220	220	200	200	220	210	200	200	200	...	...
19	...	...	220	210	210	210	200	200	200	210	210	...	...
20	...	...	220	220	210	210	200	210	210	200	210	...	...
21	...	...	220	220	220	220	210	200	200	200	210	...	...
22	...	...	230	220	220	200	200	200	200	200	220	...	...
23	...	...	230	210	220	210	190	210	200	200	200	...	...
24	...	...	230	230	220	210	210	200	200	200	200	...	...
25	...	...	230	220	220	210	210	200	210	200	220	...	...
26	...	...	220	210	210	210	200	200	200	200	190	...	...
27	...	...	230	210	200	200	200	200	200	200	200	...	...
28	...	...	230	200	210	200	200	200	190	200	200	...	...
29	...	...	220	210	210	200	210	200	200	200	200	...	...
30													
31													
MEAN*	...	...	223	214	210	205	204	202	200	203	208	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1940 | FEBRUARY 1940

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.9	1.1	1.1	1.7	1.8	1.8	1.5	1.4	1.1	1.1	1.0	0.8	1.7	2.6	3.0	3.4	3.5	3.8	3.5	3.5	3.6	3.4	3.0	2.8	1.9
2	0.8	1.0	1.1	1.1	1.7	1.7	1.7	1.7	1.7	1.1	1.1	1.0	0.8	1.7	2.6	3.2	3.5	3.7	3.8	3.5	3.5	3.5	3.4	2.8	2.7	1.9
3	0.8	1.7	1.0	1.2	1.8	1.7	1.7	1.9	1.8	2.0	1.2	0.9	0.8	1.8	2.6	3.1	3.4	3.6	3.9	3.8	3.5	3.6	3.6	3.1	2.7	1.8
4	0.8	0.6	0.9	1.1	1.7	1.7	1.7	1.7	1.7	1.2	1.1	0.8	0.8	1.7	2.4	2.8	3.4	3.6	3.5	3.7	3.5	3.6	3.7	3.1	2.7	1.8
5	0.8	0.8	0.9	1.1	1.7	1.7	1.8	1.8	1.7	1.2	1.2	0.8	0.8	1.7	2.7	3.2	3.4	3.5	3.8	3.9	3.7	3.8	3.5	3.1	2.6	2.4
6	0.8	0.8	1.0	1.8	1.8	1.8	2.0	1.8	2.2	1.8	1.7	1.4	0.8	1.7	2.5	3.1	3.5	3.7	3.7	3.9	3.7	3.7	3.5	3.1	2.6	1.8
7	0.9	1.0	1.2	1.2	1.7	1.7	1.9	1.8	2.0	p1.9b	1.8	1.1	0.8	1.8	2.6	3.1	3.5	3.6	3.7	3.9	3.8	3.7	p3.7b	3.4	3.8	1.9
8	0.8	1.0	1.1	1.8	1.8	2.0	2.0	2.2	2.2	1.8	1.2	0.9	0.8	1.7	2.5	2.9	3.5	3.9	4.0	4.0	4.0	3.9	3.5	3.5	2.8	2.0
9	0.8	1.0	1.1	1.4	1.0	2.0	2.0	2.2	2.2	2.5	1.4	1.1	0.8	1.8	2.8	3.1	3.5	3.7	4.0	4.0	3.9	4.0	3.8	3.4	3.6	1.8
10	0.8	0.8	1.2	1.4	1.5	1.9	2.1	2.0	2.2	1.8	1.2	1.0	0.9	1.7	2.6	3.1	3.6	3.8	4.0	4.2	4.2	4.0	3.7	3.6	3.0	2.3
11	0.8	1.0	1.0	1.1	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.1	1.0	1.7	2.5	3.1	3.4	3.9	4.0	4.0	4.0	4.0	3.6	3.1	2.7	1.8
12	0.8	0.8	1.2	1.8	2.5	2.3	2.1	2.3	2.0	1.8	1.4	1.2	0.9	1.7	2.5	3.0	3.5	3.8	4.1	4.1	4.0	3.8	3.5	3.1	2.7	1.8
13	0.9	1.0	p1.3c	1.4	1.8	1.8	1.8	1.8	1.8	0.7	1.2	1.0	0.8	1.7	2.6	p3.1c	3.5	3.8	4.0	3.9	3.9	3.8	3.6	3.1	2.7	1.8
14	0.8	0.9	1.7	1.8	1.8	1.8	2.0	2.1	2.2	1.8	1.4	1.1	0.8	1.7	2.6	3.1	3.5	3.7	3.9	4.0	4.0	3.9	3.5	3.2	2.8	1.8
15	0.8	0.9	1.2	1.8	1.8	2.1	1.8	2.1	1.9	2.0	1.2	1.0	0.8	1.7	2.6	3.1	3.5	3.8	4.0	4.0	4.0	3.8	3.8	3.3	2.2	1.9
16	0.8	0.9	1.1	1.8	1.8	2.0	2.3	2.2	p2.9b	2.0	1.2	1.1	0.9	1.6	2.6	3.1	3.5	3.8	4.0	4.2	4.1	4.1	3.6	2.9	2.6	1.8
17	0.8	0.8	2.5	2.2	1.8	2.0	2.0	2.0	2.6	2.0	1.4	1.2	0.8	1.7	2.6	3.5	3.7	3.9	4.0	4.0	4.0	4.0	3.7	3.2	2.6	1.8
18	0.8	0.9	1.3	1.4	1.4	1.9	1.8	2.9	1.8	1.8	1.4	1.0	0.9	1.6	2.5	3.2	3.5	3.7	3.9	3.9	3.9	3.7	3.5	3.1	2.6	1.8
19	0.6	0.8	1.1	1.1	1.8	2.0	2.1	2.0	2.1	1.8	1.4	0.8	0.8	1.7	2.7	3.1	3.5	3.8	3.9	4.0	4.0	3.8	3.6	3.1	2.6	1.8
20	0.6	0.8	0.9	1.1	1.4	1.8	1.8	1.8	1.8	1.5	1.2	0.9	0.8	1.6	2.6	3.1	3.5	3.8	3.8	3.9	3.9	3.8	3.5	3.0	2.6	1.8
21	0.6	0.8	0.9	1.1	1.4	1.8	1.8	2.0	1.8	1.8	0.9	1.0	0.8	1.6	2.6	3.0	3.5	3.7	3.8	3.9	3.8	3.7	3.4	2.9	2.6	1.8
22	0.8	0.8	1.1	1.2	1.8	1.8	1.8	1.8	1.9	1.8	1.2	0.9	0.8	1.6	2.5	3.1	3.4	3.8	3.9	3.9	3.9	3.8	3.6	3.1	2.6	1.7
23	0.6	0.8	0.8	1.2	1.8	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.8	1.7	2.6	3.0	3.5	3.8	4.0	4.0	4.0	3.8	3.6	3.0	2.6	1.7
24	0.8	0.8	1.4	1.2	1.8	1.8	1.8	1.8	1.8	1.7	1.1	0.9	0.8	1.3	2.6	3.1	3.4	3.8	3.9	3.9	3.8	3.8	3.5	3.0	2.6	1.8
25	0.6	0.8	1.0	1.2	2.0	1.8	2.0	2.7	1.7	1.4	1.3	1.2	0.8	1.7	2.5	3.0	3.4	3.8	3.8	4.0	3.9	3.7	3.5	3.0	2.6	1.7
26	0.6	0.8	1.0	1.2	1.4	1.8	1.9	1.9	1.7	1.4	1.2	1.0	0.8	1.6	2.6	3.0	3.4	3.7	3.9	4.0	3.9	3.8	3.5	3.0	2.8	1.8
27	0.8	0.9	1.0	1.4	1.8	1.8	1.8	1.8	1.8	1.4	1.1	1.0	0.8	1.7	2.6	3.2	3.5	3.7	3.8	4.0	3.9	3.8	3.5	3.0	2.7	1.7
28	0.8	0.7	1.0	1.2	1.8	1.8	1.8	1.9	1.7	1.7	1.2	1.0	0.8	1.6	2.6	2.9	3.5	3.8	3.9	4.0	3.8	3.8	3.5	2.8	2.6	1.8
29	0.6	0.8	1.8	1.8	1.8	2.0	1.9	1.9	2.1	1.9	1.8	1.2	1.1	1.7	2.6	3.0	3.5	3.9	4.0	4.1	4.1	3.9	3.5	3.1	2.8	1.7
30																										
31																										
* MEAN	0.8	0.9	1.2	1.4	1.8	1.8	1.9	2.0	1.9	1.7	1.3	1.0	0.8	1.7	2.6	3.1	3.5	3.7	3.9	3.9	3.9	3.8	3.6	3.1	2.7	1.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 107

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1940 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MARCH 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...f	...f	7.9	7.7	8.1	7.1	7.5	9.8	11.5	11.7	11.6	11.2	10.4	10.0	9.9	10.2	10.3	10.2	9.9	9.0	7.5	...f	...f	...f	...
2	...f	6.4	p5.5f	4.7	4.0	3.1	5.3	9.0	10.1	10.3	11.2	12.0	12.4	13.2	12.9	12.0	11.7	11.0	10.5	9.8	8.6	...f	...f	...f	...
3	...f	...f	...f	5.1	3.1	2.1	4.9	8.5	10.5	11.6	11.6	11.1	10.8	10.9	11.0	11.0	11.2	10.6	9.6	8.5	6.8	p7.1	7.4	8.2	...
4	8.7	p7.6f	6.5	4.7	p3.8f	3.0	4.9	8.2	10.4	10.8	10.1	10.0	10.1	10.4	10.7	10.8	10.9	10.7	10.3	8.9	...f	...f	...f	...f	...
5	8.9	7.5	6.3	5.5	4.8	4.2	5.4	8.6	10.5	11.8	12.3	12.4	11.1	10.8	11.1	11.8	12.0	12.3	12.7	11.5	9.9	9.1	p8.8f	p8.5f	9.5
6	8.3	7.9	6.3	5.9	4.4	3.1	4.8	4.3	10.2	11.0	11.2	10.0	9.9	9.8	10.2	10.4	10.8	11.0	10.8	9.5	8.7	8.4	8.7	8.8	8.5
7	9.1	7.8	7.0	6.2	5.4	5.0	6.2	8.5	10.5	11.1	11.8	11.4	10.9	10.8	10.8	11.0	10.3	10.0	9.2	8.2	6.6	p7.2f	p7.8f	8.3	8.8
8	p8.3f	8.3	6.9	6.1	5.5	p6.0f	6.4	9.0	10.7	11.7	11.7	11.7	11.8	12.1	13.2	13.7	13.6	13.2	12.9	12.2	...f	...f	...f	...f	...
9	...f	8.3	6.7	6.3	p6.0f	p5.7f	p5.5f	9.4	11.7	13.9	12.6	11.1	11.2	11.5	11.9	12.4	12.7	12.4	12.0	12.0	10.2	p9.2f	8.2	8.4	...
10	p8.9f	p9.4f	9.8	8.0	7.2	6.6	6.5	9.5	11.0	11.3	9.5	9.2	9.4	9.9	10.5	11.2	12.1	12.8	12.0	10.9	10.2	...f	...f	...f	...
11	...f	9.8	6.6	5.2	4.1	3.5	5.3	8.9	11.1	12.2	11.7	9.6	9.7	9.6	9.7	10.4	11.2	11.6	11.6	11.0	9.8	9.5	p9.7f	9.8	...
12	9.4	9.3	7.8	6.2	4.6	3.9	5.3	8.6	10.3	11.5	10.7	9.3	8.9	9.2	9.7	10.0	9.8	10.0	9.9	9.8	8.8	8.3	7.7	p8.0f	8.6
13	8.3	8.6	6.0	5.3	5.3	4.5	5.6	8.8	10.6	12.0	12.2	12.2	11.1	10.5	10.1	10.5	10.9	11.0	11.3	10.9	10.0	10.0	p9.4f	p8.8f	9.3
14	p8.2f	7.7	6.6	5.8	5.1	4.8	6.0	9.0	11.1	12.2	12.1	11.3	11.3	11.8	11.9	12.0	11.9	10.8	p9.6c	8.4	...f	...f	...f	...f	...
15	...f	7.9	6.4	5.4	4.4	3.7	5.4	9.2	11.5	11.7	11.7	10.0	9.4	9.0	9.2	9.5	8.7	9.6	9.8	8.9	p9.2f	p9.5f	p9.8f	10.0	...
16	p9.2f	p8.4f	7.5	6.0	5.7	6.0	6.8	8.9	10.5	11.6	12.8	12.9	12.5	11.0	11.0	10.8	10.7	11.3	11.5	10.8	11.0	p10.8f	p10.6f	p10.4f	9.9
17	10.1	8.0	6.1	p5.5f	4.9	4.5	6.8	8.8	10.4	11.5	11.5	10.9	10.9	10.7	10.5	10.0	9.7	9.6	9.6	8.2	...f	...f	...f	...f	...
18	...f	...f	5.5	4.2	3.6	3.1	5.0	8.6	10.7	11.7	12.3	12.6	12.0	11.3	11.0	11.4	11.0	11.0	10.6	9.4	...f	...f	...f	...f	...
19	...f	...f	...f	4.8	3.9	p3.5f	5.5	8.9	10.2	10.8	11.5	10.0	10.5	11.0	11.7	12.1	11.9	11.2	10.6	9.0	9.0	9.5	11.1	11.4	...
20	11.8	11.3	9.3	7.6	6.6	6.1	6.9	9.7	11.5	13.1	13.2	12.7	10.9	10.3	10.0	9.9	10.0	10.9	10.5	9.6	p9.7f	p9.8f	p9.9f	10.0	10.1
21	9.2	7.7	p7.1f	6.5	5.8	5.1	6.5	9.7	11.5	12.6	12.9	12.5	11.6	11.4	11.6	11.2	11.4	11.4	11.8	10.4	7.9	p8.0f	8.2	...f	...
22	...f	...f	...f	...f	2.6	2.2	5.3	8.5	10.5	11.3	11.3	11.1	11.2	11.2	11.7	12.1	11.8	12.0	11.6	10.8	11.0	11.4	10.2	9.8	...
23	10.1	9.1	6.7	5.7	4.3	3.3	4.7	9.8	11.0	10.8	9.5	10.1	10.0	10.7	11.5	11.6	11.4	10.4	9.2	8.3	8.3	8.5	8.2	7.5	8.8
24	6.7	7.2	6.8	5.7	5.2	5.0	6.6	9.9	11.8	13.0	13.0	8.2	7.9	12.4	9.5	11.4	12.9	11.9	13.1	13.0	10.8	9.9	9.9	10.2	9.7
25	7.2	6.8	...f	...f	...f	...f	5.0	9.4	12.0	11.9	10.6	10.9	11.2	10.8	10.8	10.9	10.6	10.7	10.3	9.8	11.3	12.0	10.3	9.8	...
26	11.8	9.0	7.3	7.2	7.6	7.4	7.2	10.5	12.8	13.2	12.2	11.1	10.7	11.0	11.1	11.3	11.8	12.1	11.9	11.4	10.3	9.2	p9.3f	p9.4f	10.3
27	p9.5f	9.6	7.3	7.3	5.1	4.0	5.5	9.3	11.2	13.0	13.4	12.2	p12.2b	p12.1b	p11.4b	10.5	10.0	10.0	10.0	9.8	9.5	9.5	9.1	p9.1f	9.6
28	p9.0f	9.0	7.3	6.8	6.2	6.0	5.5	8.8	11.4	13.0	13.2	11.4	11.1	11.3	11.3	10.9	11.0	11.0	10.4	9.4	...f	...f	...f	...f	...
29	8.4	6.5	5.8	5.2	4.4	p4.0f	5.2	8.9	10.9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
30	...c	...c	...c	...c	...c	...c	...c	...c	...c	12.7	p12.8c	p12.9c	p13.0c	13.1	13.0	13.0	11.8	11.8	11.2	9.8	8.5	9.5	9.8	9.3	...
31	8.7	8.8	7.9	6.8	5.5	3.6	4.1	4.7	11.0	11.0	11.3	11.0	10.3	10.9	12.2	12.4	12.5	12.0	12.0	11.6	11.0	12.0	12.4	11.8	9.8
MEAN*	9.0	8.3	7.0	6.0	5.1	4.5	5.7	8.8	11.0	11.9	11.8	11.1	10.8	11.0	11.0	11.2	11.2	11.2	10.9	10.0	9.4	9.4	9.4	9.4	9.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 108

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1940 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS MARCH 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	220	240	240	250	240	270	230	280	280	310	320	310	320	300	270	260	240	250	440	380	330	320	270	283
2	210	210	210	220	230	230	260	240	260	280	290	300	300	320	300	290	260	220	260	330	350	280	200	230	262
3	230	210	210	210	230	250	260	250	280	290	300	310	330	320	300	270	260	240	270	360	340	300	240	210	270
4	200	200	230	220	230	230	260	240	290	290	300	330	320	300	310	300	280	220	280	320	390	300	260	220	272
5	210	220	230	230	230	220	260	230	270	290	290	310	310	300	300	300	290	240	270	340	330	290	280	250	270
6	200	190	230	210	220	230	260	240	280	300	310	320	320	300	280	260	260	250	270	350	330	260	230	220	263
7	200	210	220	220	220	250	260	240	270	290	310	320	310	330	320	290	280	210	270	360	390	360	230	210	274
8	200	200	220	230	240	250	260	240	270	290	300	300	300	280	290	290	270	250	270	340	370	300	230	230	268
9	220	250	270	290	290	280	280	250	280	280	280	290	300	290	300	290	280	250	280	300	190	190	240	230	267
10	240	200	190	190	240	230	250	240	280	290	300	310	310	300	280	280	270	230	260	350	360	360	240	220	268
11	200	200	200	230	230	240	250	230	260	280	300	320	300	300	280	250	270	240	260	350	360	260	240	220	261
12	220	210	220	190	220	230	260	230	280	290	300	300	320	340	320	290	280	240	270	360	340	330	230	210	270
13	210	200	230	240	210	220	250	240	280	280	290	300	320	300	290	280	250	230	270	350	350	270	250	230	264
14	200	190	220	240	270	280	250	240	280	290	300	300	300	300	290	270	250	230	270	350	340	310	260	210	268
15	200	200	220	230	230	240	250	230	280	290	300	320	320	330	320	280	250	240	270	350	350	280	200	200	266
16	210	200	200	220	250	200	260	230	280	290	300	310	310	300	290	270	270	250	280	330	280	290	220	220	261
17	200	205	230	240	250	260	270	240	280	270	300	320	300	300	270	260	250	220	270	360	350	320	210	200	266
18	200	200	220	220	220	230	260	190	270	290	300	300	310	320	310	270	250	250	200	390	400	310	200	200	263
19	200	210	230	220	220	230	360	230	270	300	300	300	310	q300b	q280b	270	270	250	270	300	360	230	240	230	266
20	200	210	230	200	210	260	250	240	260	260	280	300	300	300	280	260	240	230	260	370	250	320	250	220	258
21	200	200	220	220	250	260	270	240	260	270	290	290	300	300	270	270	260	230	260	350	430	270	230	210	265
22	220	210	210	220	230	260	260	240	270	280	300	300	300	300	270	250	250	250	270	330	310	230	220	220	258
23	210	210	210	240	210	300	270	260	270	290	290	300	300	300	270	250	270	250	270	340	300	270	220	210	263
24	220	220	250	270	290	250	260	230	260	270	290	350	290	420	360	300	290	260	240	230	250	290	260	230	295
25	290	350	330	270	280	320	290	250	270	260	260	260	270	270	280	280	270	240	270	300	230	210	240	200	270
26	200	200	240	240	250	220	230	240	250	260	260	260	270	270	280	280	270	240	270	300	230	210	240	200	246
27	200	200	240	240	250	220	230	240	250	260	270	260	q260b	q260b	q270b	270	270	240	270	280	250	280	220	230	248
28	220	200	220	250	250	220	230	230	250	250	260	280	290	290	290	250	250	250	280	330	310	230	220	200	252
29	200	210	230	230	220	220	250	220	240	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
30	...	...	...	...	...	...	...	...	...	260	q260c	q260c	q260c	260	260	270	260	250	260	340	360	270	210	220	...
31	210	200	220	220	220	200	240	230	250	270	270	280	280	290	250	250	q250b	250	260	320	280	220	210	250	247
MEAN*	212	211	227	230	238	242	260	236	269	280	290	317	301	304	290	274	264	240	265	337	325	279	235	220	264

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 109

MARCH 1940 | MARCH 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	5.0	5.0	5.4	5.2	5.2	5.1	5.0	4.8	4.4	...	...
2	...	...	4.8	5.0	5.4	5.3	5.2	5.1	5.0	4.9	4.5	...	...
3	...	...	4.9	5.1	5.5	5.3	5.3	5.3	5.0	4.8	4.4	...	...
4	...	...	5.2	5.1	5.4	5.2	5.3	5.2	5.1	5.1	4.8	...	...
5	...	...	5.0	5.0	5.2	5.2	5.2	5.0	5.2	5.2	4.8	...	...
6	...	...	4.8	5.0	5.3	5.2	5.1	5.2	4.9	4.6	4.4	...	...
7	...	...	4.8	5.0	5.3	5.3	5.1	5.2	5.3	4.9	4.6	...	...
8	...	...	5.0	5.1	5.4	5.4	5.1	5.1	5.2	5.0	4.5	...	...
9	...	...	5.0	5.0	5.0	5.3	5.0	5.0	5.3	5.2	5.0	...	...
10	...	...	5.0	5.2	5.3	5.1	5.1	5.1	5.1	4.8	4.7	...	...
11	...	...	4.8	5.0	5.4	5.2	5.1	5.1	4.8	4.4	4.4	...	...
12	...	...	5.0	5.3	5.3	5.2	5.2	5.4	5.3	5.0	4.7	...	...
13	...	...	5.0	5.0	5.3	5.2	5.2	5.1	4.9	4.8	4.0	...	...
14	...	...	5.0	5.1	5.2	5.2	5.3	5.2	5.1	4.5	4.0	...	...
15	...	...	5.0	5.1	5.3	5.1	5.1	5.1	5.0	4.8	4.1	...	...
16	...	...	5.0	5.0	5.3	5.1	5.2	5.0	4.8	4.7	4.2	...	...
17	...	...	5.0	5.0	5.3	5.2	5.0	4.9	4.8	4.3	4.2	...	...
18	...	...	5.0	5.1	5.3	5.2	5.2	5.1	4.9	4.7	4.1	...	...
19	...	...	4.8	5.3	5.3	5.1	5.1	p5.0b	p4.7b	4.4	4.2	...	...
20	...	...	5.0	5.0	5.0	5.4	5.4	5.3	5.0	4.7	4.0	...	...
21	...	...	4.7	5.0	5.3	5.4	5.2	5.1	4.8	4.8	4.5	...	...
22	...	...	5.0	5.0	5.4	5.3	5.2	5.1	5.1	4.7	4.5	...	...
23	...	...	5.0	5.0	5.3	5.4	5.4	5.3	5.0	4.5	4.4	...	...
24	...	...	5.0	5.0	5.3	p5.2b	5.1	6.0	5.5	5.5	4.6	...	...
25	...	...	5.0	4.8	5.0	5.2	5.4	5.4	5.4	5.0	4.8	...	...
26	...	...	5.0	5.1	5.3	5.4	5.4	5.4	5.3	5.0	5.0	...	...
27	...	...	4.8	5.1	5.3	5.3	p5.3b	p5.2b	p5.1b	5.0	4.8	...	...
28	...	...	4.8	5.0	5.2	5.4	5.5	5.4	5.2	4.5	4.0	...	...
29	...	...	4.3	...c	...c	...c	...c	...c	...c	...c	...c	...	...
30	...	...	p4.8c	5.0	p5.0c	p5.1c	p5.2c	5.4	5.0	5.0	4.6	...	...
31	...	...	5.0	4.7	5.5	5.4	5.4	5.5	5.0	4.5	p4.2b	...	...
* MEAN	...	...	4.9	5.0	5.3	5.2	5.2	5.2	5.1	4.8	4.4	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	220	210	210	210	200	200	200	200	210	...	...
2	...	...	210	200	200	p220	200	200	190	200	200	...	...
3	...	...	240	220	220	210	200	200	200	200	200	...	...
4	...	...	230	220	210	210	200	200	200	210	200	...	...
5	...	...	220	210	210	200	200	200	190	200	210	...	...
6	...	...	230	210	210	200	200	200	190	200	210	...	...
7	...	...	220	220	210	200	200	210	210	210	210	...	...
8	...	...	220	220	220	220	220	200	200	210	220	...	...
9	...	...	240	230	210	210	200	190	200	220	250	...	...
10	...	...	230	210	200	200	200	200	200	200	190	...	...
11	...	...	230	210	200	200	200	190	190	190	210	...	...
12	...	...	230	210	210	200	200	200	200	210	200	...	...
13	...	...	220	220	210	210	200	200	200	200	190	...	...
14	...	...	220	220	210	200	200	200	200	210	210	...	...
15	...	...	230	230	210	210	200	200	200	200	200	...	...
16	...	...	220	210	210	210	200	200	200	200	200	...	...
17	...	...	230	210	210	210	210	200	200	200	190	...	...
18	...	...	210	230	200	210	200	200	200	190	180	...	...
19	...	...	230	220	210	210	210	p210b	p210b	210	210	...	...
20	...	...	230	220	210	220	210	200	200	200	190	...	...
21	...	...	230	220	210	210	210	200	200	200	200	...	...
22	...	...	230	220	210	210	200	210	200	210	200	...	...
23	...	...	260	230	220	210	210	210	200	210	210	...	...
24	...	...	230	220	210	p210	200	200	230	230	240	...	...
25	...	...	230	230	230	220	210	210	210	210	220	...	...
26	...	...	230	230	220	210	210	200	200	200	190	...	...
27	...	...	220	230	220	210	p210b	p210b	p210b	210	240	...	...
28	...	...	220.	220	220	210	210	200	200	200	200	...	...
29	...	...	230	...c	...c	...c	...c	...c	...c	...c	...c	...	...
30	...	...	p230c	210	p210c	p210c	p210c	210	210	210	220	...	...
31	...	...	230	230	210	200	200	200	200	210	p220b	...	...
* MEAN	...	...	227	219	211	209	204	202	201	205	207	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 110

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	0.8	1.2	1.4	1.8	1.8	1.8	1.9	1.8	1.7	1.8	1.0	0.8	1.7	2.5	3.1	3.5	3.8	3.9	4.0	4.0	3.9	3.6	3.1	2.7	1.7
2	0.8	0.8	1.2	1.8	1.7	1.8	2.4	2.2	1.8	1.8	1.4	0.9	0.8	1.7	2.7	3.1	3.5	4.0	p4.9	4.0	4.0	3.8	3.6	3.4	2.7	1.8
3	0.8	1.0	1.2	1.7	1.7	1.7	1.8	1.9	1.8	1.8	1.1	1.0	0.8	1.7	2.7	3.2	3.6	3.9	4.0	4.1	4.0	3.9	3.5	3.2	2.7	1.7
4	0.8	0.8	1.4	2.1	2.4	1.9	2.1	2.0	1.8	1.8	1.1	1.0	0.8	1.7	2.6	3.4	3.8	3.9	4.0	4.1	4.0	4.0	3.7	3.1	2.7	1.7
5	0.9	1.0	1.2	1.8	2.0	1.9	2.0	1.8	1.9	1.8	1.4	0.9	0.8	1.7	2.6	3.2	3.5	3.8	4.0	4.1	4.0	3.9	3.7	3.2	2.8	1.7
6	0.8	0.9	1.1	1.8	1.8	2.1	1.8	2.1	1.9	1.8	1.1	0.9	0.8	1.7	2.7	3.2	3.6	3.8	4.0	4.0	4.0	3.9	3.6	3.1	2.7	1.7
7	0.8	1.0	1.4	1.7	1.8	2.4	2.2	2.0	1.9	1.8	1.2	1.0	0.8	1.6	2.6	3.1	3.5	3.8	4.0	4.0	4.0	3.9	3.5	3.0	2.5	1.7
8	0.6	0.8	1.0	1.8	1.8	1.9	2.8	2.5	1.7	1.8	1.4	1.0	0.7	1.6	2.6	3.1	3.5	3.8	4.0	4.0	4.0	3.8	3.5	3.1	2.6	1.5
9	0.6	0.8	1.4	1.9	1.9	2.4	2.4	2.0	2.2	1.8	1.2	1.0	0.8	1.6	2.6	3.1	3.6	3.9	4.0	4.0	4.0	3.8	3.6	3.4	2.6	1.7
10	0.6	0.8	1.0	1.7	1.9	1.8	1.8	1.8	1.8	1.8	1.2	0.9	0.8	1.7	2.5	3.0	3.5	3.8	3.9	4.0	3.9	3.8	3.5	3.0	2.6	1.7
11	0.8	1.0	1.2	1.8	1.8	1.9	1.9	1.9	1.8	1.4	1.2	1.0	0.8	1.6	2.6	3.1	3.5	3.8	4.0	4.0	4.0	3.7	3.5	3.1	2.6	1.7
12	0.8	1.0	1.2	1.8	1.7	1.8	1.7	1.9	1.8	1.4	1.1	0.8	0.8	1.6	2.5	3.1	3.5	3.8	3.9	3.9	4.0	3.7	3.5	3.1	2.6	1.7
13	0.8	0.8	1.1	1.8	1.7	1.8	1.8	1.8	1.8	1.7	1.2	1.0	0.8	1.7	2.6	3.1	3.5	3.7	3.9	3.9	3.8	3.8	3.4	3.0	2.6	1.8
14	0.6	1.0	1.1	1.2	2.5	2.6	2.7	2.6	2.7	2.0	1.2	1.0	0.8	1.6	2.5	3.0	3.4	3.6	4.3	4.0	4.1	3.9	3.4	3.0	2.6	1.4
15	0.8	0.8	1.2	1.8	1.8	1.8	1.8	1.9	1.8	1.7	1.0	0.8	0.8	1.7	2.6	3.1	3.3	3.7	3.9	3.9	3.9	3.8	3.5	3.0	2.6	1.4
16	0.6	1.0	1.1	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.2	0.8	0.8	1.7	2.5	3.0	3.5	3.7	3.9	3.9	3.9	3.5	3.5	3.1	2.6	1.6
17	0.8	1.0	1.1	1.8	1.8	2.9	1.8	1.9	1.8	1.8	1.1	1.0	0.8	1.5	2.5	3.1	3.5	3.8	4.3b	3.9	4.0	3.7	3.5	3.0	2.7	1.6
18	0.6	0.8	1.0	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.1	0.9	0.8	1.5	2.5	2.5	3.6	3.8	3.9	4.0	3.9	3.7	3.5	3.0	2.8	1.7
19	0.8	1.0	1.2	1.8	1.7	1.9	2.0	p2.2b	p2.3b	2.5	1.8	0.8	0.8	1.7	2.6	3.1	3.5	3.7	4.0	4.0	p3.9b	p3.8b	3.8	3.0	2.6	1.7
20	0.7	0.9	1.7	2.0	2.0	2.8	2.0	2.0	1.8	1.8	1.0	1.0	1.0	1.7	2.6	3.2	3.5	3.7	4.0	4.0	3.9	3.7	3.5	3.0	2.5	1.5
21	0.6	0.8	0.9	1.7	1.9	2.0	2.0	1.9	1.8	1.7	1.1	1.0	0.6	1.6	2.5	3.1	3.5	3.7	3.9	4.0	3.8	3.7	3.4	3.1	2.4	1.4
22	0.6	0.8	1.1	1.8	2.5	2.8	2.3	2.1	1.9	1.8	1.1	1.0	0.8	1.6	2.5	3.1	3.5	3.8	4.0	4.0	4.0	3.7	3.5	3.1	2.5	1.6
23	1.0	p3.7	2.8	2.7	2.8	2.7	2.3	2.8	2.1	1.8	1.7	1.1	0.8	1.8	3.7	3.5	3.8	4.0	4.0	4.0	4.1	3.8	3.6	3.0	2.5	1.4
24	0.8	1.0	2.4	2.0	1.8	p2.2	1.9	2.2	2.0	2.4	1.8	1.0	1.0	1.7	2.5	3.4	3.5	3.8	p3.9	4.0	3.9	3.8	3.5	3.0	2.4	1.7
25	0.6	0.8	1.0	1.8	2.6	2.4	2.0	2.4	2.0	1.8	1.1	1.0	0.8	1.8	2.4	3.0	3.5	3.9	4.1	4.1	4.0	3.8	3.5	3.0	2.5	1.4
26	0.8	0.8	1.2	1.9	2.2	2.2	2.4	2.7	2.0	1.9	1.2	0.8	0.8	1.7	2.6	3.3	3.7	3.9	4.1	4.1	4.3	3.9	3.5	3.0	2.6	1.8
27	0.6	0.9	1.8	1.8	2.1	3.0	p3.0b	p3.0b	p3.0b	3.1	2.2	1.7	0.8	1.7	3.7	3.2	3.5	4.0	4.1	p4.1b	p4.0b	p3.9b	3.9	3.4	2.6	1.5
28	0.8	0.9	1.2	1.8	2.4	2.1	2.4	2.2	2.2	1.8	1.7	1.0	0.8	1.2	2.4	3.1	3.5	4.0	4.0	4.0	4.0	3.9	3.5	3.1	2.7	1.4
29	0.6	1.0	1.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.7	2.7	3.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
30	...c	...c	...c	1.7	p2.0c	p2.3c	p2.5c	2.8	2.2	1.8	1.1	0.9	0.8	...c	...c	...c	3.7	p3.7c	p3.8c	p3.9c	4.0	3.8	3.5	3.0	3.4	1.4
31	1.0	1.8	1.8	2.4	2.4	2.2	2.2	2.2	2.0	1.8	p1.8b	1.8	0.8	1.9	2.6	3.1	3.5	3.8	4.0	4.0	4.0	3.8	3.5	p3.0b	2.6	1.6
* MEAN	0.8	1.0	1.3	1.8	2.0	2.2	2.1	2.2	2.0	1.8	1.3	1.0	0.8	1.7	2.6	3.1	3.5	3.8	4.0	4.0	4.0	3.8	3.6	3.1	2.6	1.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 111

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1940 APRIL 1940

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	11.0	11.6	11.2	8.6	8.8	7.6	7.8	10.5	12.4	13.3	13.6	13.3	12.3	12.7	12.1	11.4	11.4	11.8	11.7	10.0	8.8	p8.5f	8.2	p8.1f	10.7
2	8.0	6.1	p5.6f	5.0	4.5	3.9	4.9	9.4	12.0	13.4	13.0	11.5	10.8	11.1	11.0	9.3	10.4	11.5	11.7	11.7	11.8	11.8	11.0	10.3	9.6
3	10.5	9.3	9.1	10.1	9.9	8.9	8.8	8.9	11.6	12.4	12.1	11.9	12.4	12.3	11.8	11.6	12.2	12.5	12.2	10.7	9.6	p10.4f	11.3	10.7	10.9
4	10.1	9.8	9.8	8.4	5.6	2.6	4.8	8.7	10.1	10.1	9.7	10.0	10.8	11.9	13.0	13.2	13.0	12.8	12.5	10.0	p9.7f	p9.4f	9.0	p9.4f	9.6
5	9.7	8.3	7.0	5.9	4.9	3.7	5.3	8.5	10.2	9.7	9.0	9.1	9.3	9.8	10.6	11.1	11.1	11.6	10.2	8.3	p8.4f	8.6	7.6	7.2	8.5
6	6.8	6.9	6.3	5.8	4.6	4.2	5.5	8.9	10.8	11.2	10.4	9.8	10.3	10.8	11.7	11.7	12.0	12.0	11.7	10.5	10.2	10.0	p9.5f	9.0	9.2
7	7.9	7.8	p6.8f	5.9	p4.7f	3.5	4.9	8.8	9.9	10.2	9.9	9.7	10.0	10.8	11.2	11.0	11.0	11.1	10.6	8.4	p8.3f	p8.1f	p8.0f	7.9	8.6
8	8.0	8.4	5.2	p4.2f	3.1	2.4	4.6	8.4	10.4	10.6	9.6	9.2	9.4	10.4	10.8	11.2	11.2	10.8	10.5	8.3	p8.2f	p8.0f	p7.9f	7.8	8.3
9	p6.2f	4.5	4.9	4.8	4.3	3.2	4.9	8.5	10.7	11.2	9.9	9.6	10.0	10.5	11.0	11.2	11.6	12.0	12.2	10.8	p10.3f	p9.8f	p9.3f	8.9	8.8
10	8.6	7.0	5.9	4.8	3.4	p4.0f	4.5	8.1	9.9	10.7	9.4	8.8	9.2	10.2	10.9	11.2	11.6	11.6	10.4	8.0	p8.2f	p8.4f	p8.6f	8.9	8.4
11	7.0	6.0	5.3	4.6	3.6	2.4	4.6	8.4	10.6	11.7	11.8	10.3	9.8	10.0	p10.4c	p10.8c	11.1	11.3	10.9	9.5	9.1	p8.7f	p8.3f	8.0	8.5
12	6.8	6.4	5.5	4.5	4.1	3.9	5.2	8.4	10.3	11.0	10.2	9.4	...c	...c	...c	...c	...c	...c	...c	7.3	p7.3f	p7.2f	p7.1f	7.1	...
13	6.4	6.2	4.6	3.6	3.6	3.3	5.0	8.5	10.0	11.5	12.2	11.8	11.8	11.1	11.5	11.1	10.8	10.6	11.0	10.0	p9.6f	9.2	8.9	8.2	8.8
14	7.6	7.6	6.5	6.5	6.0	6.4	7.3	9.1	10.8	11.5	11.5	10.5	9.7	10.3	10.5	10.3	10.3	10.5	10.2	8.5	8.3	9.4	9.4	9.0	9.1
15	8.3	6.6	5.5	4.5	4.3	4.0	5.5	8.9	11.0	12.2	12.6	12.4	12.3	12.5	12.3	11.8	11.1	10.8	10.8	10.8	11.2	11.9	12.6	11.9	9.8
16	11.3	9.2	6.4	5.1	4.4	3.9	5.3	8.1	9.9	...c	...c	...c	...c	...c	...c	...c	12.4	12.1	p10.2c	8.3	8.4	p8.0f	p7.6f	p7.2f	...
17	6.9	6.8	6.3	5.3	5.1	5.2	6.7	8.2	p8.8c	p9.5c	10.1	10.8	11.0	11.1	11.6	11.5	11.5	11.3	10.7	9.8	7.9	p7.7f	7.5	8.0	8.7
18	8.6	8.0	7.0	5.5	4.7	4.5	5.6	8.7	10.6	11.4	10.7	9.9	9.8	10.4	11.3	11.2	12.0	11.6	10.6	8.5	8.4	8.9	9.7	9.2	9.0
19	9.3	8.7	8.3	7.5	6.3	4.9	5.1	8.3	10.0	10.8	10.7	10.2	10.8	11.5	12.1	12.2	12.0	11.1	9.7	8.7	8.0	7.0	6.9	7.8	9.1
20	8.6	7.9	p6.8f	5.8	p5.8f	5.8	7.0	8.9	9.8	10.1	9.8	10.1	10.0	10.4	10.9	11.5	11.6	11.2	10.3	8.6	7.7	p7.7f	p7.7f	7.7	8.8
21	p7.9f	8.1	7.1	6.0	6.0	6.2	6.8	7.9	9.7	10.2	9.9	9.8	9.9	10.4	10.2	10.4	10.4	10.0	9.9	8.7	9.0	8.2	7.1	6.2	8.6
22	6.7	6.6	5.7	5.1	4.4	4.1	5.7	8.7	10.5	10.9	10.0	10.0	9.8	10.0	10.5	10.8	10.8	10.9	10.6	9.5	9.1	8.8	8.7	8.7	8.6
23	9.0	7.9	6.5	5.9	5.3	4.5	5.9	8.7	10.0	10.2	9.9	9.6	9.6	9.6	10.7	11.3	11.3	11.3	10.9	10.0	10.3	10.2	9.5	8.4	9.0
24	8.0	7.0	6.2	5.1	3.9	3.1	5.0	8.5	10.4	10.9	9.7	9.2	9.3	9.4	9.6	9.5	9.7	9.6	9.7	9.5	10.1	10.3	9.1	7.1	8.3
25	7.7	...f	...f	...f	...f	...f	7.4	9.5	10.7	11.6	11.3	10.5	10.0	9.8	9.7	9.6	10.0	11.1	11.2	10.0	p9.7f	9.3	8.8	8.3	...
26	7.9	7.2	6.6	6.0	6.3	6.5	7.1	10.5	11.9	13.2	13.6	13.4	13.8	11.6	10.5	10.6	11.2	11.0	10.8	10.7	10.3	...c	...c	...c	...
27	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	12.3	11.3	10.4	10.6	11.2	11.5	12.0	11.8	11.6	11.7	11.4	11.4	9.8	8.6	...
28	8.1	7.5	5.9	4.9	4.3	3.0	4.8	8.4	10.1	11.2	11.6	11.1	10.2	10.1	10.3	10.5	10.3	10.5	10.0	9.0	9.8	11.2	10.3	8.1	8.8
29	7.5	6.0	4.7	3.2	3.0	3.0	4.7	8.0	9.7	10.6	10.6	10.3	10.1	9.8	9.8	10.1	9.9	9.5	9.5	9.2	8.8	8.5	8.8	7.6	8.0
30	6.7	6.8	5.8	4.7	3.9	3.1	4.5	7.7	9.3	10.5	9.9	8.6	8.7	9.5	9.5	9.4	8.9	8.5	7.9	7.3	7.9	p7.4f	p6.9f	6.3	7.5
31																									
MEAN*	8.2	7.5	6.5	5.6	5.0	4.4	5.7	8.7	10.4	11.1	10.9	10.4	10.4	10.7	11.0	11.0	11.1	11.1	10.7	9.4	9.2	9.1	8.8	8.3	9.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 112

APRIL 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1940

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	230	230	240	240	230	260	270	280	260	280	280	290	280	270	250	250	250	280	310	390	280	210	225	263
2	200	210	220	210	230	230	260	230	250	270	260	300	300	290	280	250	270	260	290	290	240	200	180	200	247
3	230	280	280	300	310	290	290	240	250	250	270	270	290	290	280	q260	250	250	270	310	280	220	210	200	265
4	200	230	220	210	210	220	260	240	250	290	280	270	280	280	260	250	260	250	280	340	260	290	240	230	254
5	200	190	190	230	220	220	250	240	250	290	300	300	300	290	260	250	250	250	290	350	340	190	240	220	255
6	220	210	220	240	230	240	260	240	260	290	290	280	280	280	260	250	260	260	280	330	300	250	240	210	258
7	210	210	220	230	220	230	260	240	260	280	290	310	280	300	280	250	260	250	280	290	270	260	200	210	254
8	210	200	210	230	220	240	260	230	260	260	290	300	300	300	270	270	280	260	300	380	260	270	200	210	259
9	210	200	220	230	230	230	260	230	260	280	300	300	320	300	280	280	270	260	280	330	300	240	220	220	260
10	220	220	230	220	230	250	270	250	280	290	290	300	290	300	290	270	270	240	300	390	370	360	260	200	275
11	200	210	210	220	230	230	260	230	250	280	290	300	310	290	q290c	q290c	290	250	280	290	240	260	210	200	255
12	210	220	220	230	240	240	260	240	260	290	300	300	...c	...c	...c	...c	...c	...c	...c	230	230	240	200	200	...
13	200	210	210	230	240	240	260	230	250	260	270	300	300	290	300	270	260	250	280	320	210	240	210	220	252
14	220	230	240	290	280	270	270	230	270	280	290	300	300	300	300	260	250	260	290	400	330	220	230	210	272
15	220	210	210	240	250	180	250	230	q250c	280	290	290	300	290	260	260	250	240	260	270	270	200	220	200	247
16	210	210	230	200	240	270	270	240	270	280	290	300	290	280	280	260	270	250	290	300	220	230	220	220	255
17	220	210	210	240	260	270	240	240	250	280	280	290	290	300	q280c	260	270	250	290	370	360	320	220	220	268
18	220	210	220	210	230	240	270	230	260	300	q300c	290	300	300	290	250	270	240	290	270	280	240	210	230	256
19	210	230	220	220	220	230	270	240	280	280	280	290	280	300	270	290	290	250	290	330	330	340	260	220	268
20	220	220	200	240	240	240	270	240	280	280	290	300	300	300	300	270	260	260	300	370	390	360	210	230	274
21	200	230	220	240	230	230	250	230	260	290	290	300	300	300	290	250	280	250	300	350	300	250	230	230	262
22	230	220	230	220	250	260	280	230	270	290	290	300	300	300	250	260	250	250	290	310	260	210	230	230	259
23	200	220	220	230	240	240	270	240	250	280	300	300	300	300	300	280	250	250	290	330	260	220	210	220	258
24	220	200	220	230	220	230	260	240	260	300	290	300	320	320	320	290	280	250	280	300	270	210	200	210	259
25	270	300	340	420	330	240	260	200	260	290	290	300	300	300	300	250	270	250	300	350	260	190	230	230	[illegible]
26	230	240	260	260	250	190	180	240	250	260	250	270	280	300	290	280	270	250	270	200	200	...c	...c	...c	...
27	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	280	290	280	290	250	290	260	250	270	[illegible]	[illegible]	210	210	230	...
28	210	230	230	220	220	230	250	230	250	250	290	290	300	300	300	270	270	290	250	350	310	210	200	210	257
29	210	210	210	240	250	240	270	250	270	280	300	300	310	310	260	270	260	240	280	270	250	240	220	220	257
30	220	200	210	220	220	220	250	240	260	280	290	330	320	310	330	280	300	260	300	310	290	270	240	200	265
31																									
MEAN*	215	220	226	239	241	237	259	237	260	279	287	295	297	296	283	266	266	253	285	317	284	249	219	215	259

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 113

APRIL 1940 — APRIL 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.8	5.2	5.2	5.3	5.5	5.3	5.0	4.5	3.9	...	...
2	...	...	4.8	5.2	5.3	5.5	5.5	5.3	4.7	4.3	4.6	...	...
3	...	...	4.8	4.8	5.1	5.3	5.3	5.4	4.9	p4.9	4.8	...	...
4	...	...	4.8	5.3	5.2	5.1	5.1	5.1	4.9	4.3	4.3	...	...
5	...	...	4.5	5.3	5.3	5.3	5.1	5.0	4.7	4.2	4.2	...	...
6	...	...	4.5	5.3	5.4	5.0	5.1	4.9	5.2	4.9	4.0	...	...
7	...	...	5.0	5.3	5.3	5.4	5.0	5.3	5.1	4.5	4.4	...	...
8	...	...	4.8	5.0	5.3	5.4	5.4	5.3	4.7	4.8	4.7	...	...
9	...	...	4.8	4.9	5.3	5.4	5.3	5.2	4.8	4.8	4.5	...	...
10	...	...	4.8	5.1	5.1	5.3	5.0	5.1	5.0	4.7	4.2	...	...
11	...	...	4.5	5.2	5.3	5.1	5.5	5.0	p5.0c	p4.9c	4.8	...	...
12	...	...	4.6	5.1	5.3	5.4	...c	...c	...c	...c	...c	...	...
13	...	...	4.5	4.8	5.1	5.3	5.4	4.8	5.3	4.5	4.0	...	...
14	...	...	5.0	5.0	5.3	5.5	5.1	5.0	4.8	4.2	3.6	...	...
15	...	...	p4.8c	5.0	5.3	5.3	5.5	5.2	4.8	4.2	3.8	...	...
16	...	...	4.8	5.2	5.4	5.5	5.3	5.2	4.9	4.4	4.2	...	...
17	...	...	4.8	5.0	5.3	5.5	5.5	5.3	p5.0c	4.5	4.3	...	...
18	...	...	4.5	5.0	p5.2c	5.4	5.4	5.4	5.2	4.4	4.5	...	...
19	...	...	5.0	5.0	5.3	5.4	5.3	5.4	5.0	5.0	5.1	...	...
20	...	...	5.0	5.2	5.4	5.4	5.5	5.4	5.2	4.7	4.5	...	...
21	...	...	4.8	5.3	5.3	5.4	5.4	5.5	5.4	4.5	4.8	...	...
22	...	...	5.2	5.1	5.4	5.5	5.5	5.3	4.8	4.4	4.0	...	...
23	...	...	4.5	5.0	5.3	5.4	5.4	5.4	5.3	4.9	4.5	...	...
24	...	...	4.8	5.2	5.2	5.4	5.4	5.5	5.4	4.8	4.4	...	...
25	...	...	4.6	5.2	5.2	5.4	5.4	5.4	5.2	4.4	4.5	...	...
26	...	...	4.3	4.8	4.8	4.8	5.1	5.4	5.0	5.0	4.8	...	...
27	...	...	p4.9c	p5.1c	5.4	5.3	5.2	5.3	4.6	4.8	4.5	...	...
28	...	...	4.6	4.8	5.2	5.3	5.4	5.0	5.0	4.7	4.5	...	...
29	...	...	4.8	5.3	5.3	4.9	5.1	5.0	4.6	4.4	4.0	...	...
30	...	...	4.8	5.0	5.0	4.9	5.0	5.1	5.2	4.5	4.6	...	...
31													
* MEAN	...	...	4.8	5.1	5.2	5.3	5.3	5.2	5.0	4.6	4.4	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	250	230	220	200	200	200	200	190	190	...	...
2	...	...	220	220	210	200	200	200	190	190	220	...	...
3	...	...	220	220	210	210	220	200	220	240	220	...	...
4	...	...	240	220	210	200	200	200	200	200	230	...	...
5	...	...	220	220	210	200	200	200	190	190	230	...	...
6	...	...	220	210	210	200	200	200	200	200	220	...	...
7	...	...	230	220	200	200	200	200	200	200	200	...	...
8	...	...	240	210	200	200	200	200	200	200	240	...	...
9	...	...	230	220	220	200	200	200	200	190	210	...	...
10	...	...	220	210	210	200	200	200	200	200	200	...	...
11	...	...	220	220	210	200	200	190	p200c	p230c	260	...	...
12	...	...	220	210	200	200	...c	...c	...c	...c	...c	...	...
13	...	...	220	210	200	210	210	200	200	200	200	...	...
14	...	...	230	220	210	220	210	200	200	200	200	...	...
15	...	...	230	220	210	210	200	200	190	200	220	...	...
16	...	...	220	220	220	210	200	200	200	200	210	...	...
17	...	...	230	210	200	200	200	200	200	210	210	...	...
18	...	...	240	p230c	p220c	210	200	190	190	200	220	...	...
19	...	...	230	220	210	200	200	200	200	200	200	...	...
20	...	...	230	220	220	210	210	200	210	210	220	...	...
21	...	...	230	220	210	210	200	200	200	200	220	...	...
22	...	...	240	220	220	210	210	200	200	200	200	...	...
23	...	...	230	220	210	200	200	200	200	200	200	...	...
24	...	...	230	220	200	200	200	190	190	200	220	...	...
25	...	...	220	220	210	210	210	210	200	190	210	...	...
26	...	...	230	220	210	200	210	210	220	210	200	...	...
27	...	...	p230c	p220c	210	200	200	200	200	210	220	...	...
28	...	...	220	220	210	200	200	200	200	200	230	...	...
29	...	...	230	220	220	210	210	210	200	210	220	...	...
30	...	...	220	220	210	200	200	180	200	200	230	...	...
31													
* MEAN	...	...	228	219	210	204	203	199	200	202	215	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 114

APRIL 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1940

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.8	1.0	1.1	2.4	2.4	2.4	1.9	1.8	1.5	1.1	0.9	0.8
2	0.6	0.8	1.1	1.8	1.8	2.0	2.1	2.0	1.8	1.8	1.7	0.8	0.9
3	0.6	0.8	1.4	1.7	1.8	2.0	2.0	1.9	1.8	1.8	1.2	0.9	0.8
4	0.8	0.8	1.2	1.8	1.8	2.0	1.9	1.9	1.7	1.7	0.9	0.8	0.8
5	0.8	0.9	0.6	1.8	1.7	1.8	1.8	1.8	1.7	1.8	1.2	0.9	0.8
6	0.6	0.8	1.1	1.8	1.7	1.8	2.0	1.8	1.8	1.7	1.2	0.8	0.8
7	0.8	0.8	0.8	1.2	1.7	1.8	1.7	1.8	1.8	1.4	1.2	1.0	0.8
8	0.6	0.8	0.8	1.8	1.8	1.8	1.8	1.8	1.8	1.4	1.2	0.8	0.8
9	0.8	0.8	1.0	1.7	1.8	1.9	2.0	1.5	1.8	1.4	1.4	1.0	0.8
10	0.6	0.8	1.0	2.6	1.8	1.8	1.9	1.9	1.8	1.2	1.0	0.8	0.8
11	0.8	0.9	1.2	1.8	1.9	2.1	1.9	1.9	p1.7c	p1.4c	1.2	1.0	0.8
12	0.6	0.8	1.0	1.8	1.8	2.2	...	...	...	...	...	...	...
13	0.6	1.0	1.2	2.2	2.2	2.4	2.2	2.0	1.4	1.3	1.2	1.1	0.9
14	0.6	0.8	1.2	1.8	2.2	2.4	2.2	1.9	1.8	1.4	1.1	1.1	0.9
15	0.6	0.8	1.2	1.8	1.9	2.4	2.4	1.9	1.8	1.4	1.2	1.2	0.8
16	0.6	0.8	1.2	1.8	3.6	2.4	1.8	1.4	1.4	1.4	1.2	1.1	0.8
17	0.6	1.0	1.7	1.7	1.7	1.9	1.8	1.8	1.9	1.4	1.2	1.0	0.8
18	0.6	1.8	1.2	1.6	1.8	1.9	1.8	1.4	1.8	1.4	1.3	1.0	0.8
19	0.6	0.8	1.0	1.2	1.8	1.9	1.8	1.8	1.8	1.3	1.0	0.8	0.8
20	0.6	1.0	1.4	1.5	3.0	2.0	2.0	2.0	1.8	1.4	1.3	1.0	0.8
21	0.6	0.8	1.2	1.4	2.0	2.0	1.9	2.4	1.8	1.4	1.2	0.9	0.8
22	0.6	0.8	2.0	2.6	2.7	2.5	2.2	2.2	2.0	1.8	1.3	1.1	0.8
23	0.8	0.8	1.0	1.8	1.8	1.8	2.0	1.9	1.5	1.4	1.2	1.0	0.8
24	0.8	0.8	1.2	1.4	1.4	1.9	1.9	1.8	1.6	1.2	1.1	1.0	0.8
25	0.6	0.7	1.2	1.8	1.4	1.8	2.0	1.8	2.0	1.3	1.2	0.8	0.6
26	0.6	0.8	1.0	1.8	1.9	2.0	1.9	1.8	1.8	1.7	1.1	0.8	0.8
27	...c	...c	...c	...c	1.9	1.8	1.9	1.8	1.4	1.4	1.2	1.2	1.0
28	0.6	0.8	1.8	1.4	1.8	1.8	1.9	2.6	1.8	1.4	1.2	1.0	0.8
29	0.8	1.7	1.8	1.8	1.9	3.1	2.7	2.0	1.5	1.3	1.2	1.0	0.8
30	0.8	0.9	1.1	1.1	1.3	1.4	1.8	1.4	1.3	1.2	1.1	0.8	0.6
31													
* MEAN	0.7	0.9	1.2	1.7	2.0	2.0	2.0	1.9	1.7	1.4	1.2	1.0	0.8

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.7	2.6	3.0	3.8	3.8	4.0	3.9	3.8	3.6	3.4	3.0	2.5	1.2
2	1.8	2.5	3.1	3.7	3.8	3.9	4.0	3.9	3.6	3.5	3.3	2.4	1.3
3	1.5	2.5	3.1	3.5	3.5	3.7	4.0	4.0	4.0	3.7	3.4	3.1	2.4
4	1.6	2.5	3.1	3.5	3.7	3.9	3.8	3.9	3.7	3.5	3.1	2.4	1.2
5	1.8	2.5	3.1	3.5	3.7	3.8	3.8	3.7	3.6	3.4	3.2	2.5	1.3
6	1.6	2.5	3.1	3.5	3.7	3.9	3.9	3.8	3.7	3.5	3.2	2.4	1.3
7	1.6	2.6	3.1	3.5	3.7	3.8	3.8	3.8	3.6	3.3	2.9	2.4	1.2
8	1.6	2.5	3.1	3.4	3.7	3.8	3.8	3.7	3.5	3.4	3.4	3.1	1.5
9	1.5	2.5	3.0	3.4	3.6	3.8	3.8	3.7	3.6	3.4	3.0	2.4	1.7
10	1.4	1.6	1.6	3.5	3.7	3.8	3.9	3.8	3.6	3.3	2.9	2.4	1.1
11	1.7	2.7	3.1	3.5	3.6	3.8	3.8	3.8	p3.6c	p3.3c	3.1	2.4	1.2
12	1.6	2.6	3.1	3.6	3.7	3.9	...c	...c	...c	...c	...c	...c	...c
13	1.6	2.6	3.1	3.5	4.0	4.0	4.0	4.0	3.6	3.4	3.0	2.4	1.2
14	1.9	2.5	3.1	3.5	3.8	4.0	4.1	3.9	3.7	3.5	2.8	2.4	1.2
15	1.8	3.0	3.1	3.5	3.7	3.9	3.9	3.8	3.7	3.4	2.9	2.3	1.2
16	1.4	2.5	3.1	3.5	4.0	3.9	4.0	3.8	3.7	3.3	2.9	2.3	1.2
17	1.9	2.5	3.2	3.5	3.7	3.8	3.8	3.7	3.5	3.3	2.9	2.4	1.2
18	1.6	2.5	3.1	4.5	4.3	3.7	3.8	3.7	3.5	3.3	3.0	2.4	1.2
19	1.5	2.6	3.0	3.5	3.7	3.9	3.8	3.8	3.6	3.3	2.9	2.4	1.0
20	1.3	2.5	3.1	3.5	3.8	3.8	3.9	3.8	3.6	3.2	3.0	2.3	1.2
21	1.4	2.5	3.1	3.5	3.7	3.9	3.9	3.9	3.7	3.3	3.0	2.4	1.0
22	1.6	2.5	3.2	3.6	3.8	4.0	3.9	3.8	3.6	3.3	2.9	2.4	1.1
23	1.4	2.7	3.3	3.5	3.7	3.8	3.8	3.8	3.5	3.3	2.8	2.4	1.2
24	1.3	2.4	2.5	3.5	3.7	3.8	3.8	3.7	3.5	3.3	2.8	2.4	1.2
25	1.4	1.4	3.0	3.4	3.6	3.7	3.8	3.6	3.5	3.3	2.9	2.4	1.2
26	1.8	2.4	3.0	3.6	3.6	3.7	3.7	3.7	3.5	3.3	2.8	2.2	1.1
27	...c	...c	...c	...c	3.7	3.7	3.8	3.7	3.5	3.2	2.8	2.2	1.0
28	1.5	2.5	3.0	3.4	3.6	3.7	3.7	3.9	3.5	3.3	2.9	2.5	1.0
29	1.4	2.5	3.0	3.4	3.7	4.0	3.8	3.7	3.4	3.2	2.7	2.1	0.9
30	1.5	2.5	3.0	3.2	3.4	3.6	3.7	3.5	3.5	3.2	2.8	2.1	1.0
31													
* MEAN	1.6	2.5	3.0	3.5	3.7	3.8	3.8	3.8	3.6	3.4	3.0	2.4	1.2

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 115

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1940 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MAY 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	5.6	4.8	4.9	4.2	3.5	3.0	4.8	7.8	9.3	10.2	10.0	9.4	9.0	9.0	9.8	10.0	10.4	10.2	9.2	8.5	8.5	9.0	9.8	8.8	7.9
2	8.3	7.0	6.0	4.7	4.2	3.6	5.0	7.8	9.2	9.0	8.5	8.0	7.9	8.0	8.1	8.6	8.2	8.4	8.2	7.4	7.8	7.8	7.8	6.9	7.3
3	7.2	6.2	5.4	4.0	3.4	2.9	4.8	7.9	9.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.2	7.5	...
4	7.8	6.6	5.8	4.2	4.1	4.5	5.0	8.0	9.7	10.2	9.3	8.3	8.4	8.6	9.9	9.8	9.8	9.8	9.7	8.8	9.2	9.4	8.2	7.4	8.0
5	9.8	5.4	4.4	3.7	3.0	2.5	4.3	7.4	9.1	9.2	8.7	8.7	8.8	9.0	8.9	9.6	9.4	9.4	8.8	7.4	6.8	7.1	7.4	7.4	7.3
6	7.8	7.0	5.8	4.6	3.4	2.5	4.2	7.4	9.1	9.1	8.6	7.9	8.0	8.2	8.5	8.4	8.8	9.2	8.8	8.0	8.7	9.2	7.9	6.9	7.4
7	7.0	5.2	4.3	4.4	3.6	p3.0f	4.0	8.0	9.7	9.8	9.0	8.2	8.2	8.0	8.6	9.0	9.1	9.2	9.2	9.2	9.9	9.6	8.5	8.4	7.6
8	8.6	6.8	5.0	3.2	2.6	2.2	4.4	7.2	9.0	10.5	9.6	8.9	8.6	8.4	9.2	9.9	9.8	9.6	9.2	8.8	8.8	8.3	7.8	6.9	7.6
9	6.7	6.2	5.8	5.4	5.2	5.0	5.3	7.8	9.2	9.4	9.3	10.0	9.6	8.9	8.9	8.9	8.8	8.6	8.2	7.8	8.0	7.8	7.3	6.2	7.7
10	5.6	p5.1f	4.6	4.4	4.4	4.4	p5.3f	7.2	9.2	10.3	11.2	11.3	10.2	9.8	10.1	10.6	10.0	9.8	9.4	8.4	7.8	7.6	7.2	6.0	7.9
11	5.9	6.3	6.4	5.0	4.4	4.0	4.9	8.0	9.6	10.8	10.9	10.4	10.2	9.6	9.6	9.5	8.7	8.6	8.9	8.0	7.8	8.2	7.8	7.0	7.9
12	6.2	6.2	6.0	p5.8f	p5.7f	5.6	5.8	8.0	10.0	10.8	10.4	9.3	8.4	8.1	8.2	8.2	8.2	8.4	8.2	7.2	8.2	8.0	6.7	7.0	7.7
13	5.6	5.0	4.8	4.3	4.8	4.9	5.1	8.0	9.3	10.0	10.2	10.4	9.2	8.4	8.3	8.6	8.6	8.3	8.5	8.6	8.6	8.0	8.2	6.0	7.6
14	5.5	5.2	5.0	4.6	4.8	4.5	5.4	8.0	9.7	10.6	10.7	9.4	8.6	8.8	9.0	8.8	8.9	8.8	8.3	7.3	6.9	7.2	6.9	6.0	7.5
15	5.8	5.3	5.4	5.2	5.1	4.9	6.0	8.0	9.6	10.5	9.8	8.8	9.2	9.6	p9.4c	p9.1c	p8.8c	8.5	7.8	6.9	6.9	7.1	6.4	5.8	7.5
16	5.3	4.4	3.9	3.5	3.3	3.4	4.8	8.1	10.2	11.0	10.6	10.2	9.0	9.2	10.1	10.7	11.0	10.6	10.5	9.5	9.4	10.1	8.3	5.9	8.0
17	5.5	5.5	5.5	5.2	4.4	4.0	4.8	7.5	9.6	10.2	9.6	8.9	8.7	8.4	8.4	8.8	9.0	9.2	9.8	8.8	8.7	8.8	9.0	9.4	7.8
18	9.9	9.0	7.5	5.9	3.8	3.2	4.0	7.1	8.9	10.5	11.0	10.6	9.5	9.2	9.0	9.6	9.3	9.4	9.4	9.6	8.4	7.0	5.9	6.2	8.1
19	6.4	6.0	6.4	5.5	4.4	3.4	4.7	7.2	8.6	8.8	8.8	8.8	8.4	8.6	9.1	9.0	8.4	8.4	8.8	8.6	8.9	8.3	8.0	7.0	7.5
20	7.9	8.4	6.7	6.2	5.6	5.1	5.6	7.9	9.5	9.8	9.4	9.2	8.7	8.9	8.8	8.2	8.2	8.1	7.8	8.4	8.6	8.8	7.1	6.4	7.9
21	6.8	6.8	6.8	5.6	4.6	3.8	4.7	7.9	10.1	11.2	11.4	10.4	10.4	9.8	9.1	8.6	8.6	8.8	8.8	8.3	8.8	9.0	8.6	7.3	8.2
22	6.8	6.7	6.5	6.4	6.0	7.0	7.0	8.9	10.0	10.7	10.6	10.1	9.0	8.8	8.7	8.2	8.2	8.0	7.7	7.5	8.0	8.4	7.9	p7.2f	8.1
23	6.4	6.2	5.8	4.9	4.5	4.2	5.0	7.0	8.0	8.8	8.6	8.2	7.6	7.6	7.3	7.5	8.2	8.3	8.5	8.1	8.5	9.4	9.1	4.5	7.2
24	6.4	p7.3f	8.2	p7.1f	6.1	p4.8f	3.5	6.9	9.5	9.2	9.5	10.0	9.2	8.8	8.4	8.5	8.9	8.3	8.2	8.5	8.4	8.9	7.4	6.9	7.9
25	7.2	6.4	...c	...c	...c	...c	...c	7.8	9.4	9.3	9.0	8.2	8.2	7.6	8.2	8.1	8.4	8.5	8.4	8.4	9.1	9.7	7.4	5.8	...
26	5.6	5.4	4.6	4.4	4.2	3.6	4.8	4.1	9.6	10.3	10.1	9.4	9.0	8.5	8.7	9.5	9.6	9.7	8.2	6.4	p6.5f	6.6	7.8	6.6	7.2
27	4.7	p4.4f	4.2	p3.9f	p3.6f	3.4	4.5	7.1	9.0	10.2	10.4	10.0	9.6	8.7	8.5	9.0	9.6	8.4	7.2	5.5	p5.9f	6.3	7.2	6.9	7.0
28	6.2	6.2	9.1	5.4	5.4	p5.7f	p6.0f	6.3	8.0	8.4	p8.0c	7.5	p7.8c	p8.0c	8.3	8.8	8.8	8.4	7.5	7.0	7.4	7.6	7.5	7.0	7.3
29	6.4	6.5	4.4	3.6	3.0	2.7	3.9	7.2	8.4	8.6	7.8	8.1	8.2	8.0	8.8	9.1	9.4	8.1	8.4	8.9	8.6	8.8	7.4	5.3	7.1
30	5.6	5.6	5.4	4.2	3.8	3.2	4.0	6.6	8.2	8.1	7.7	7.4	7.4	7.7	8.4	8.2	8.8	7.8	7.8	7.8	8.2	8.3	6.6	6.2	6.8
31	6.0	5.0	5.4	4.9	4.1	3.7	4.2	6.3	7.9	8.4	8.0	8.2	7.8	8.2	8.2	7.9	8.0	8.0	7.7	7.2	6.8	7.2	7.0	5.7	6.7
*MEAN	6.7	6.1	5.7	4.8	4.3	4.0	4.9	7.4	9.2	9.8	9.6	9.1	8.8	8.6	8.8	9.0	9.0	8.8	8.6	8.0	8.1	8.2	7.7	6.7	7.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 116

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1940

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	210	220	210	220	230	260	270	240	280	280	300	310	300	300	310	250	250	260	300	310	310	250	220	220	263
2	210	210	220	230	240	230	260	240	280	300	310	300	330	310	270	260	260	260	280	280	260	240	190	240	259
3	210	210	210	210	220	230	250	240	250	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	210	210	...
4	210	210	220	230	230	220	250	230	280	290	300	300	310	310	320	320	280	230	290	250	240	230	210	210	257
5	200	210	220	220	220	240	260	220	270	300	330	300	310	310	280	260	250	260	290	330	300	260	230	210	262
6	200	210	230	220	210	230	260	260	290	290	300	300	330	310	310	q290c	260	250	290	310	230	210	200	210	258
7	210	220	220	230	290	310	260	230	280	280	310	330	330	300	300	280	270	240	290	290	210	230	220	220	265
8	210	210	220	230	220	230	240	220	200	280	290	300	350	330	300	280	260	250	280	290	270	230	210	210	255
9	210	220	260	280	280	220	250	230	260	280	300	300	300	300	340	300	280	250	290	310	290	240	210	210	267
10	200	220	230	250	250	270	270	240	280	280	300	300	300	260	260	260	250	250	290	280	250	200	200	200	254
11	200	220	220	240	250	230	260	230	260	270	290	300	300	300	290	280	260	250	290	310	280	200	190	220	256
12	220	220	230	270	260	230	250	240	270	290	300	350	320	310	340	300	300	260	300	290	270	225	210	210	269
13	210	220	250	260	290	250	250	230	270	280	290	350	300	270	290	280	280	260	290	290	270	220	210	210	263
14	180	220	250	300	290	290	270	230	250	300	300	310	320	320	300	300	280	250	290	340	300	250	200	220	273
15	210	230	240	250	270	270	250	230	260	280	300	300	300	300	q290c	q280c	q270c	250	310	340	280	240	220	200	265
16	210	210	230	250	250	230	250	230	250	280	290	320	300	290	300	270	270	240	290	290	260	220	210	210	256
17	210	220	220	230	250	270	240	280	280	300	310	320	340	300	270	260	240	290	320	320	260	260	200	220	267
18	290	220	220	220	250	390	290	240	260	280	280	300	300	310	300	290	300	270	280	300	300	280	260	230	278
19	230	200	210	210	220	240	270	240	280	...c	...c	...c	...c	...c	...c	...c	...c	250	270	180	250	240	230	220	...
20	200	210	220	230	230	230	270	250	290	290	300	360	300	310	300	280	300	250	270	250	230	220	210	230	260
21	210	200	210	220	220	220	270	230	250	260	300	300	330	300	280	270	290	250	280	270	240	230	220	200	252
22	230	230	240	290	310	260	230	230	260	280	300	360	300	310	300	290	290	260	300	270	250	200	200	210	267
23	210	230	210	250	240	270	280	250	280	320	320	350	350	320	380	260	270	260	250	250	240	200	200	220	267
24	280	310	270	280	210	210	260	240	...c	...c	...c	...c	...c	...c	...c	...c	...c	270	290	270	250	220	220	220	...
25	220	240	250	270	290	290	270	240	q260c	q280c	q300c	310	350	310	300	280	280	240	260	260	220	200	210	220	265
26	210	220	220	240	240	250	250	240	270	290	300	330	330	310	320	300	290	250	310	380	300	280	210	210	273
27	250	240	220	310	280	250	280	240	280	270	290	300	330	350	310	300	300	250	320	350	330	260	220	230	282
28	240	240	240	270	260	270	290	240	270	320	q320c	330	q330c	q350c	370	330	300	250	300	310	290	240	210	220	283
29	220	210	220	220	240	230	260	230	270	290	300	320	370	300	300	300	290	240	250	240	230	210	210	220	257
30	240	230	220	230	230	220	270	230	280	290	300	340	320	350	310	300	300	240	270	260	250	220	290	220	267
31	200	220	220	210	220	230	270	230	290	310	290	330	310	340	300	290	290	290	270	280	270	240	200	210	263
MEAN*	217	222	227	244	248	251	261	237	268	288	301	319	320	310	305	284	277	254	287	290	264	231	214	216	264

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 117

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1940

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.8	5.0	5.0	5.2	4.9	5.2	5.2	4.0	4.0	...	...
2	...	...	4.8	5.0	5.3	4.8	4.9	4.9	4.7	4.2	4.0	...	...
3	...	...	4.7	...c	...c	...c	...c	...c	...c	...c	...c	...	...
4	...	...	4.8	4.9	4.8	4.8	4.9	4.9	4.8	5.0	4.5	...	...
5	...	...	5.0	5.1	5.3	4.9	4.8	4.8	4.7	4.4	4.0	...	...
6	...	...	4.8	4.9	4.8	4.9	4.9	4.8	4.7	p4.4f	4.1	...	...
7	...	...	4.8	5.0	5.3	5.0	4.8	4.9	4.8	4.6	4.6	...	...
8	...	...	4.5	5.0	4.7	4.8	5.0	4.8	4.9	4.8	4.5	...	...
9	...	...	4.6	4.9	5.1	4.8	4.8	4.7	5.0	4.7	4.5	...	...
10	...	...	4.8	4.9	5.2	4.8	4.9	4.7	4.5	4.2	4.0	...	...
11	...	...	5.0	4.9	5.0	5.1	4.9	5.0	4.4	4.5	4.0	...	...
12	...	...	4.5	4.8	5.2	5.1	4.9	5.1	5.1	4.8	4.7	...	...
13	...	...	4.9	4.8	5.1	5.5	5.0	4.6	4.8	4.7	4.5	...	...
14	...	...	4.5	5.3	5.1	4.9	4.9	4.8	5.0	4.8	4.3	...	...
15	...	...	4.7	5.0	5.3	5.4	5.2	4.9	p4.8c	p4.6c	p4.4c	...	...
16	...	...	4.5	5.0	5.2	5.1	5.2	5.3	5.0	4.5	4.5	...	...
17	...	...	4.8	4.8	5.2	5.4	5.1	5.1	5.2	4.6	4.0	...	...
18	...	...	4.4	5.0	5.0	5.1	5.2	5.4	5.1	4.8	4.8	...	...
19	...	...	4.6	...c	...c	...c	...c	...c	...c	...c	...c	...	...
20	...	...	4.7	5.0	5.2	5.2	5.0	4.9	5.0	4.4	4.5	...	...
21	...	...	4.8	4.8	5.3	4.9	5.0	4.9	4.6	4.4	4.2	...	...
22	...	...	5.0	4.8	5.1	5.7	5.3	5.2	5.0	4.7	4.5	...	...
23	...	...	4.3	5.1	5.0	5.1	5.0	4.8	4.9	4.3	4.0	...	...
24	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
25	...	...	p4.6c	p4.7c	p4.8c	4.9	5.1	4.8	4.6	4.5	4.3	...	...
26	...	...	4.5	5.0	5.0	5.3	4.9	4.8	5.3	4.9	4.4	...	...
27	...	...	4.8	4.7	4.8	4.9	4.9	5.4	4.9	4.7	4.4	...	...
28	...	...	4.5	5.0	p5.2c	5.3	p5.3c	p5.2c	5.2	4.9	4.5	...	...
29	...	...	4.8	4.8	5.0	4.9	5.5	4.8	4.9	4.7	4.5	...	...
30	...	...	4.5	4.8	4.8	5.0	5.0	4.9	4.7	4.8	4.7	...	...
31	...	...	4.5	5.0	4.8	5.0	4.9	4.9	4.7	4.7	4.5	...	...
* MEAN	...	...	4.7	4.9	5.1	5.1	5.0	5.0	4.9	4.6	4.4	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	220	220	200	200	200	200	200	200	230	...	...
2	...	...	210	210	200	200	200	190	190	190	210	...	...
3	...	...	230	...c	...c	...c	...c	...c	...c	...c	...c	...	...
4	...	...	230	210	210	200	200	190	190	200	220	...	...
5	...	...	220	200	200	200	200	190	200	210	210	...	...
6	...	...	220	200	200	190	200	190	190	p280	210	...	...
7	...	...	220	210	200	200	200	200	190	190	220	...	...
8	...	...	210	210	210	200	200	190	200	190	210	...	...
9	...	...	210	200	200	210	200	200	200	190	210	...	...
10	...	...	220	200	210	200	200	190	190	190	230	...	...
11	...	...	220	220	200	210	200	190	200	190	210	...	...
12	...	...	230	220	210	210	200	200	190	190	230	...	...
13	...	...	230	220	210	210	210	190	190	200	210	...	...
14	...	...	220	220	210	210	210	210	200	220	220	...	...
15	...	...	220	220	210	200	210	200	p210c	p220c	p230c	...	...
16	...	...	220	210	200	200	200	200	200	210	210	...	...
17	...	...	220	210	210	200	200	190	200	200	230	...	...
18	...	...	230	230	210	210	220	210	210	210	210	...	...
19	...	...	220	...c	...c	...c	...c	...c	...c	...c	220	...	...
20	...	...	230	220	210	220	200	200	200	200	220	...	...
21	...	...	220	210	210	200	200	200	200	200	230	...	...
22	...	...	220	220	210	210	200	200	210	210	230	...	...
23	...	...	230	230	210	210	210	200	190	200	210	...	...
24	...	...	...c	...c	...c	...c	...c	...c	...c	220	p230c	...	...
25	...	...	p230c	p220c	p210c	210	200	200	200	210	210	...	...
26	...	...	220	210	200	200	200	210	200	210	230	...	...
27	...	...	220	210	200	200	200	200	200	210	200	...	...
28	...	...	210	210	p210c	200	p200c	p210c	220	200	230	...	...
29	...	...	210	210	200	200	200	200	210	220	210	...	...
30	...	...	220	210	200	200	200	200	200	200	200	...	...
31	...	...	220	...c	...c	...c	...c	...c	...c	...c	...c	...	...
* MEAN	...	...	221	213	205	204	202	198	199	206	218	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 118

MAY 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1940

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.9	1.2	1.4	1.8	1.8	1.8	1.8	1.8	1.4	1.2	0.8	0.8
2	0.8	0.7	1.2	1.4	1.8	1.9	1.9	1.4	1.4	1.2	1.2	0.8	0.6
3	0.8	0.8	1.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
4	1.0	0.8	1.0	1.2	1.4	1.8	1.8	1.4	1.4	1.2	1.0	0.8	0.6
5	0.6	0.8	1.0	1.2	1.4	1.8	1.4	1.8	1.4	1.2	1.0	0.6	0.8
6	0.8	0.8	1.0	1.2	1.5	1.8	1.8	1.4	1.8	1.2	1.0	0.8	0.6
7	0.6	0.8	1.2	1.2	1.2	1.4	1.3	1.4	1.2	1.2	1.0	0.7	0.6
8	0.8	0.8	1.0	1.7	1.7	1.7	1.8	1.7	1.8	1.7	1.6	p1.2c	p0.9c
9	0.6	0.7	1.0	1.2	1.7	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.7
10	0.6	0.8	1.0	1.1	1.2	1.3	1.4	1.2	1.2	1.2	0.8	0.8	0.8
11	0.5	0.6	0.8	1.1	1.4	1.4	1.4	1.3	1.2	1.1	0.8	0.6	0.8
12	0.8	1.0	1.1	1.2	1.4	1.4	1.9	1.4	1.2	1.0	1.0	0.8	0.8
13	0.8	0.8	1.0	1.2	1.4	1.8	1.4	1.3	1.2	1.2	1.1	0.8	0.6
14	0.6	1.0	1.1	1.1	1.5	1.8	1.8	p3.1	1.4	1.1	1.0	0.8	0.6
15	0.8	0.8	1.2	1.1	1.4	1.4	1.4	1.4	p1.2c	p1.0c	p0.9c	0.8	0.6
16	0.8	0.8	1.0	1.2	1.2	1.4	1.4	1.4	1.2	1.2	0.8	0.9	0.8
17	0.6	0.8	1.0	1.8	1.4	1.4	1.8	1.4	1.4	1.4	1.0	0.8	0.6
18	0.6	0.6	1.8	1.1	1.2	1.8	2.2	1.8	1.8	1.2	1.0	0.8	0.6
19	0.8	0.8	1.0	1.2	1.8	1.5	1.9	1.4	1.5	1.2	1.1	1.0	0.8
20	0.8	0.8	1.0	1.2	1.4	2.2	2.3	1.8	1.4	1.2	1.0	0.8	0.6
21	0.6	0.8	1.1	1.2	1.4	1.8	1.4	1.4	1.4	1.2	1.0	0.8	0.6
22	0.8	0.8	1.0	1.2	1.2	1.8	1.9	1.4	1.4	1.1	0.8	0.8	0.6
23	0.7	0.9	1.2	1.1	1.4	1.2	1.8	1.4	1.2	1.2	1.0	1.0	0.8
24	1.0	0.8	1.0	1.7	1.4	1.3	2.5	1.1	1.2	1.2	1.0	1.0	0.6
25	0.6	0.8	1.0	1.7	1.4	1.4	1.2	1.3	1.1	1.1	1.3	0.8	0.8
26	0.8	0.7	1.0	1.2	1.3	1.2	1.2	1.4	1.2	1.4	0.9	0.8	1.0
27	0.6	0.8	0.9	1.0	1.0	1.2	1.4	1.2	1.2	1.1	1.1	0.9	0.6
28	0.6	0.8	0.8	1.1	p1.2c	1.2	p1.2c	p1.2c	1.2	1.2	0.8	0.6	0.6
29	0.6	0.7	0.8	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.2	0.8
30	0.8	0.6	1.0	1.2	1.2	1.2	1.4	1.2	1.4	1.2	1.2	1.2	1.0
31	0.8	0.8	0.8	1.3	1.3	1.4	2.0	1.5	1.5	1.7	1.2	1.2	0.9
* MEAN	0.7	0.8	1.1	1.2	1.4	1.5	1.6	1.5	1.4	1.2	1.0	0.9	0.7

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.4	2.4	2.9	3.3	3.4	3.6	3.7	3.6	3.4	3.2	2.8	2.1	0.9
2	1.5	2.4	2.7	3.4	3.5	3.7	3.5	3.5	3.4	3.2	2.7	2.2	0.8
3	1.4	2.5	2.9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
4	1.4	2.4	3.0	3.3	3.5	3.6	3.6	3.5	3.3	3.1	2.7	1.3	1.0
5	1.4	2.4	3.0	3.3	3.5	3.6	3.7	3.5	3.3	3.1	2.8	2.0	1.0
6	1.6	2.4	3.0	3.3	3.5	3.6	3.6	3.5	3.4	3.8	2.6	2.1	1.0
7	1.4	2.4	3.0	3.3	3.4	3.6	3.6	3.5	3.3	3.1	2.6	2.1	1.0
8	1.4	2.4	3.0	3.4	3.5	3.5	3.6	3.6	3.4	3.0	2.9	2.1	p1.0c
9	1.2	2.4	2.2	3.1	3.5	3.6	3.6	3.5	3.3	3.0	2.8	2.0	1.1
10	1.2	2.4	2.9	3.3	3.4	3.6	3.5	3.4	3.3	3.1	2.7	2.0	0.9
11	1.3	2.4	3.0	3.3	3.6	3.6	3.5	3.4	3.6	3.0	2.7	2.1	0.8
12	1.4	2.5	3.0	3.3	3.5	3.7	3.6	3.5	3.4	3.1	2.8	2.1	0.8
13	1.3	2.4	3.0	3.3	3.5	3.7	3.7	3.6	3.4	3.1	2.9	2.1	1.2
14	1.4	2.5	3.0	3.4	3.6	3.7	3.7	4.0	3.5	3.1	2.7	2.1	1.0
15	1.4	2.5	3.0	3.3	3.6	3.7	3.6	3.7	p3.4c	p3.1c	p2.8c	2.0	0.8
16	1.2	2.5	3.0	3.4	3.7	3.8	3.6	3.6	3.5	3.3	2.8	2.0	1.0
17	1.4	2.5	3.0	3.5	3.6	3.7	3.8	3.6	3.5	3.1	2.8	2.1	1.0
18	1.5	2.4	3.1	3.2	3.5	3.8	3.9	3.7	3.4	3.1	2.7	2.1	0.9
19	1.4	2.5	3.0	...c	...c	...c	...c	...c	...c	...c	2.7	2.3	1.0
20	1.4	2.5	3.0	3.3	3.5	3.8	3.8	3.7	3.4	3.2	2.7	2.0	0.9
21	1.3	2.4	2.9	3.2	3.8	3.6	3.6	3.5	3.5	3.2	2.8	2.1	1.0
22	1.4	2.4	3.1	3.3	3.4	3.6	3.7	3.6	3.5	3.3	2.8	2.0	1.0
23	1.3	2.5	3.0	3.2	3.5	3.6	3.7	3.5	3.3	3.2	2.8	2.0	1.2
24	1.2	2.2	2.9	3.2	...c	...c	...c	...c	...c	...c	2.8	2.0	0.9
25	1.4	2.4	2.9	p3.1c	p3.3c	3.5	3.5	3.6	3.5	3.2	2.8	2.2	1.0
26	1.2	2.5	2.9	3.3	3.5	3.6	3.6	3.6	3.4	3.2	2.8	2.0	1.0
27	1.2	2.4	2.8	3.2	3.4	3.5	3.6	3.4	3.2	3.2	2.8	2.0	1.0
28	1.2	2.4	2.8	3.2	p3.4c	3.5	p3.6c	p3.7c	3.8	3.0	2.3	2.0	1.2
29	1.4	2.2	2.8	2.4	3.0	3.8	3.7	3.8	3.6	3.1	2.7	2.0	1.0
30	1.3	2.4	3.0	3.1	4.0	3.9	4.0	3.9	3.9	3.2	2.5	2.0	1.0
31	0.8	2.4	2.9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
* MEAN	1.3	2.4	2.9	3.2	3.5	3.6	3.6	3.6	3.4	3.2	2.7	2.0	1.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F_2 EQUAL TO OR LESS THAN f^0F_1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 119

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1940 JUNE 1940

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.0	6.5	6.8	5.9	4.3	3.0	3.5	5.9	7.0	7.8	7.9	7.8	7.8	8.4	8.4	8.6	8.3	6.8	8.2	8.1	8.2	8.0	7.4	7.0	7.1
2	7.5	7.6	7.6	6.9	6.7	4.8	4.4	6.0	7.4	8.3	8.3	8.6	9.0	9.0	9.1	9.0	8.9	8.6	8.6	8.3	8.6	9.0	7.4	6.0	7.7
3	6.2	5.6	5.2	4.4	3.9	4.2	4.4	6.5	8.2	8.8	9.2	8.4	7.9	7.8	8.3	8.0	8.5	8.6	8.0	7.2	7.2	7.7	7.7	6.9	7.0
4	6.1	5.2	3.9	3.0	2.4	2.5	3.3	6.5	8.0	8.4	8.2	7.3	7.5	7.8	7.9	8.0	8.5	8.4	8.2	7.0	7.7	8.0	7.9	7.1	6.6
5	5.8	4.5	4.3	4.4	4.4	p3.8f	3.2	6.0	7.3	7.8	8.5	7.6	7.6	8.2	7.8	7.7	8.0	7.8	7.8	7.5	8.0	8.7	7.8	7.0	6.7
6	5.7	...f	...f	...f	...f	...f	5.7	7.4	9.0	9.2	9.3	8.8	9.0	8.4	8.0	8.7	8.9	9.0	7.6	6.0	6.7	6.6	6.3	7.0	...
7	7.5	7.2	7.3	6.8	5.1	4.6	5.1	7.6	8.9	9.1	9.4	9.4	10.0	10.4	9.3	9.9	9.9	9.3	8.6	8.2	7.0	6.1	p7.1f	8.2	8.0
8	7.1	6.6	5.6	5.2	4.1	3.4	4.0	6.2	7.6	7.5	7.6	8.8	7.8	8.0	8.0	8.0	7.5	7.6	7.2	6.8	7.3	6.9	5.8	5.8	6.7
9	6.0	6.1	6.2	4.8	4.0	2.6	3.6	6.8	8.6	8.5	7.7	7.2	8.0	8.4	8.7	8.1	8.1	8.6	8.6	7.9	7.6	7.7	8.4	6.3	7.0
10	6.3	5.4	4.8	4.3	4.0	4.0	4.6	7.0	8.5	9.0	7.8	8.3	8.0	8.0	7.8	8.1	8.2	8.5	7.4	6.1	6.8	8.0	7.8	6.2	6.9
11	5.9	5.6	4.8	3.4	2.5	2.0	3.3	6.3	7.3	8.0	8.4	8.7	8.0	8.5	8.4	8.6	9.1	9.4	8.4	7.8	7.5	8.0	7.5	7.0	6.8
12	6.6	5.8	4.9	4.1	3.4	2.8	3.6	6.4	7.8	8.0	7.5	7.8	8.0	7.7	7.4	7.7	7.8	7.3	7.4	6.6	6.6	6.8	6.5	5.4	6.4
13	5.4	5.6	5.2	4.2	4.0	4.0	3.6	6.1	7.8	8.0	8.2	8.3	8.7	9.2	8.9	8.6	8.8	8.5	7.2	7.0	7.6	9.3	7.8	7.5	7.1
14	5.6	5.2	5.4	4.0	3.6	2.8	3.8	6.4	6.9	7.3	7.6	7.3	8.0	7.1	7.3	7.5	7.6	8.0	7.2	6.5	6.8	7.4	8.4	6.8	6.4
15	6.2	5.8	5.6	p5.6f	p5.6f	5.6	4.2	7.2	8.5	8.2	9.4	8.5	8.3	8.5	7.8	8.0	8.3	7.7	7.4	6.8	7.4	7.0	6.1	p6.5f	7.1
16	7.0	7.0	6.5	6.0	3.0	2.2	3.4	6.3	8.0	8.0	7.7	7.4	7.7	8.1	8.0	8.1	8.3	8.0	8.4	7.6	7.5	7.4	7.8	8.1	7.0
17	6.8	5.8	4.7	3.3	3.2	p3.2f	3.2	5.8	7.4	7.6	8.0	8.0	7.7	8.0	7.6	8.8	8.9	8.2	7.6	7.3	7.8	7.8	8.2	6.8	6.7
18	6.7	6.8	7.4	6.6	5.8	8.3	p7.2f	6.0	6.9	7.6	8.2	8.2	8.6	9.0	8.8	8.4	8.1	8.3	p8.4c	p8.5c	8.6	9.0	p8.2c	7.3	7.8
19	p7.2c	7.0	6.0	5.9	5.4	p5.6c	5.7	7.0	8.5	8.9	7.8	7.7	8.4	9.1	9.0	8.8	8.8	8.2	8.4	7.6	7.5	8.8	7.4	6.5	7.5
20	5.6	5.9	5.8	5.2	4.2	3.8	4.4	6.0	6.8	7.3	7.3	7.2	7.1	7.8	7.6	8.4	8.2	8.4	8.0	7.8	8.2	7.5	7.0	6.4	6.8
21	6.7	7.2	6.4	5.4	5.0	4.9	5.0	5.6	6.4	7.0	6.8	7.7	7.4	7.2	7.0	7.4	8.0	8.3	8.6	7.2	7.5	8.8	8.4	7.0	7.0
22	7.4	6.4	5.9	4.2	3.3	2.8	3.8	6.6	7.8	8.0	7.7	7.8	8.2	8.0	8.3	8.4	8.8	8.7	8.6	7.6	6.4	...f	...f	...f	...
23	...f	5.4	4.8	3.6	2.8	2.4	3.2	6.0	7.7	8.3	8.2	8.0	8.0	8.7	8.4	8.6	8.8	8.8	8.1	8.2	8.4	7.2	7.3	7.5	...
24	7.5	7.0	7.6	p7.4f	p7.2f	p7.0f	6.8	6.6	8.0	8.8	9.2	8.5	8.0	8.0	7.4	7.8	8.2	7.6	6.6	5.8	6.5	6.4	6.1	4.8	7.3
25	4.8	6.0	6.0	p6.0f	p6.1f	p6.2f	6.2	6.2	8.2	7.6	7.4	9.2	9.8	6.9	6.8	7.5	9.4	8.6	9.0	8.5	7.0	6.8	...f	...f	...
26	...f	...f	...f	...f	...f	...f	3.4	6.2	7.8	8.1	8.4	8.4	8.0	8.6	8.5	9.0	9.0	8.8	8.5	8.4	8.2	8.8	8.8	7.0	...
27	5.2	4.8	4.2	3.8	3.3	3.2	3.6	6.2	8.0	8.4	8.8	8.8	8.6	8.6	9.0	8.6	9.2	8.8	8.5	7.9	7.8	7.6	7.6	6.0	6.9
28	4.6	4.4	3.8	3.4	3.4	3.3	4.0	7.4	8.8	8.6	8.0	7.8	8.0	7.6	8.3	8.5	9.1	8.9	9.1	8.8	8.8	8.8	7.5	6.3	7.0
29	6.4	...c	...c	...c	...c	...c	...c	...c	7.7	8.0	7.7	7.5	7.7	7.9	7.7	9.2	8.9	9.3	8.9	8.2	8.8	8.8	6.9	6.9	...
30	8.0	7.1	5.8	4.6	p4.2f	3.8	4.6	7.4	9.0	9.0	8.4	8.5	8.8	9.2	9.0	8.8	9.6	8.7	9.6	8.9	9.0	9.2	8.8	8.0	7.8
31																									
MEAN*	6.4	6.1	5.6	4.9	4.3	3.9	4.3	6.5	7.8	8.2	8.2	8.1	8.2	8.3	8.2	8.4	8.6	8.4	8.1	7.5	7.6	7.9	7.5	6.8	7.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 120

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1940 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JUNE 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	210	220	220	210	230	270	230	280	310	320	330	350	380	310	360	290	260	260	290	230	220	210	210	268
2	220	220	260	250	220	220	280	220	270	290	320	300	320	300	320	330	290	250	240	240	230	220	200	220	260
3	220	220	220	230	240	250	270	230	260	290	320	300	340	350	340	270	280	240	280	320	280	240	220	210	268
4	210	210	210	220	250	290	280	240	270	300	330	300	360	310	310	330	260	240	290	300	290	240	220	220	270
5	200	210	240	250	300	330	280	230	330	330	330	320	400	380	360	280	290	250	250	270	280	250	230	220	284
6	230	250	240	260	240	220	250	230	260	290	300	310	330	330	280	270	270	260	330	370	310	280	280	260	277
7	240	270	300	260	240	220	250	210	270	280	320	320	310	290	250	230	250	250	270	300	350	300	240	210	268
8	230	230	230	230	230	230	220	230	260	290	330	370	360	360	340	270	280	240	270	250	230	200	210	220	263
9	200	210	220	240	210	220	260	240	270	300	350	340	340	320	350	290	280	240	270	250	240	220	210	210	262
10	200	220	230	240	270	260	270	240	320	300	310	340	380	330	420	270	300	250	290	340	310	240	220	210	282
11	210	210	210	230	230	250	270	220	260	310	310	390	350	350	320	250	270	250	280	280	260	230	220	220	266
12	220	220	200	220	220	240	280	230	290	320	350	340	360	350	320	340	300	250	290	290	260	220	210	210	272
13	220	200	220	230	190	280	290	230	280	290	290	310	350	340	310	300	290	250	250	300	240	230	200	210	262
14	230	230	210	210	220	270	280	240	290	300	330	290	430	320	360	300	280	260	320	360	310	220	230	240	280
15	250	300	320	300	250	230	260	230	290	260	320	350	330	370	420	350	300	250	280	280	300	310	260	270	295
16	240	220	210	200	220	250	290	240	280	320	350	370	400	470	310	300	290	260	280	280	250	230	220	200	278
17	200	210	210	250	280	340	290	240	290	300	300	330	360	360	320	360	300	250	280	290	260	220	230	230	279
18	240	230	250	280	290	290	290	250	290	300	320	q330c	330	q320c	300	280	260	250	290	270	250	230	230	230	275
19	200	220	260	270	240	220	250	240	260	290	320	340	350	330	320	280	250	240	270	270	250	230	210	220	264
20	210	210	220	220	220	220	280	220	270	290	320	350	330	340	270	270	290	250	270	280	260	210	220	220	260
21	220	210	230	230	240	240	230	240	280	280	330	370	350	330	260	290	290	240	250	270	250	230	210	220	262
22	210	200	200	230	240	230	250	230	280	300	320	300	350	340	340	270	270	240	260	320	360	300	270	230	272
23	210	210	220	220	230	250	280	240	300	280	300	330	350	350	330	300	300	250	270	280	270	240	240	210	269
24	220	250	270	270	250	250	270	230	290	290	340	330	350	350	310	320	290	260	310	340	300	220	200	220	280
25	230	260	290	280	300	270	290	240	250	270	280	300	330	410	350	330	260	290	320	350	340	340	370	360	305
26	310	310	290	300	290	290	210	230	300	300	270	310	300	310	330	300	250	250	270	280	270	250	210	220	277
27	210	220	220	220	220	230	280	240	360	270	320	310	380	450	350	260	340	250	270	280	280	230	200	200	275
28	210	220	230	250	230	240	250	230	280	250	360	340	400	340	350	300	300	250	280	300	270	240	210	210	272
29	200	...c	...c	...c	...c	...c	...c	...c	270	290	380	350	360	330	290	330	260	250	270	250	250	240	240	230	...
30	230	210	220	240	240	250	270	230	270	270	300	280	350	330	300	330	300	250	260	260	250	260	230	210	264
31																									
MEAN*	221	227	236	243	242	252	267	233	282	292	321	328	353	348	325	299	283	251	277	292	274	243	228	225	273

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 121

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.5	4.9	4.9	4.5	4.9	5.0	4.9	5.3	4.9	...	...
2	...	...	4.4	4.8	4.8	4.8	5.0	4.8	5.0	5.0	4.5	...	...
3	...	...	4.5	4.9	5.2	4.8	5.0	5.0	4.8	4.4	4.3	...	...
4	...	...	4.5	5.0	4.8	4.8	5.0	4.8	4.7	4.5	4.0	...	...
5	...	...	5.0	5.4	4.8	4.8	5.3	5.0	4.8	4.4	4.3	...	...
6	...	...	4.5	4.8	5.0	4.9	4.9	4.9	4.8	4.2	4.1	...	...
7	...	...	4.8	4.6	5.3	5.0	5.0	4.8	4.4	3.8	3.8	...	...
8	...	...	4.3	4.8	4.9	5.0	5.0	5.0	4.8	4.4	4.2	...	...
9	...	...	4.4	4.9	5.5	5.0	4.9	4.8	4.9	4.7	4.2	...	...
10	...	...	5.0	4.9	5.1	5.0	5.1	5.0	5.5	4.5	4.3	...	...
11	...	...	4.4	5.1	4.8	5.2	5.0	4.9	4.8	4.5	4.4	...	...
12	...	...	4.6	5.2	5.0	5.0	5.1	4.9	4.7	4.8	4.4	...	...
13	...	...	4.4	4.8	4.9	4.8	5.0	4.7	4.9	4.7	4.2	...	...
14	...	...	4.4	4.9	4.8	4.8	5.2	4.9	4.8	4.7	4.3	...	...
15	...	...	4.5	4.5	5.3	5.4	5.0	5.0	5.2	4.9	4.5	...	...
16	...	...	4.8	4.9	5.1	5.0	5.1	5.0	4.7	4.7	4.4	...	...
17	...	...	4.5	4.9	5.0	5.0	5.0	5.0	4.8	5.1	4.5	...	...
18	...	...	4.6	4.8	5.2	p5.1c	5.0	p4.9c	4.7	4.7	3.7	...	...
19	...	...	4.4	4.8	4.8	5.0	5.1	4.9	4.8	4.5	4.4	...	...
20	...	...	4.4	4.7	4.8	4.9	4.9	4.9	4.7	4.5	4.4	...	...
21	...	...	4.4	4.6	4.8	4.8	5.0	4.6	4.5	4.6	4.4	...	...
22	...	...	4.6	4.8	4.8	4.8	4.9	4.8	4.8	4.4	4.0	...	...
23	...	...	4.8	4.8	4.8	4.9	5.0	4.9	4.7	4.7	4.6	...	...
24	...	...	4.7	4.7	5.0	5.3	5.0	4.9	5.0	4.8	4.5	...	...
25	...	...	4.5	4.4	4.8	5.1	5.1	4.8	5.3	5.3	5.0	...	...
26	...	...	4.8	5.0	5.0	5.4	5.3	5.0	4.9	4.9	4.7	...	...
27	...	...	4.6	4.8	5.3	5.1	5.3	5.7	5.0	4.3	5.1	...	...
28	...	...	4.8	4.4	5.4	5.1	5.3	5.0	5.0	4.8	4.5	...	...
29	...	...	4.5	4.8	5.1	5.1	5.2	4.9	4.7	5.2	4.3	...	...
30	...	...	4.4	4.7	5.0	4.7	5.0	5.2	5.0	5.2	4.6	...	...
31													
* MEAN	...	...	4.6	4.8	5.0	5.0	5.0	4.9	4.8	4.7	4.4	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	p220c	220	210	200	200	200	190	190	220	...	...
2	...	...	220	220	210	200	200	200	200	200	220	...	...
3	...	...	220	210	200	200	200	200	220	200	210	...	...
4	...	...	200	210	200	200	200	200	200	190	210	...	...
5	...	...	210	220	210	200	190	210	200	200	230	...	...
6	...	...	220	220	220	200	210	210	210	220	220	...	...
7	...	...	230	220	210	210	210	200	200	210	230	...	...
8	...	...	210	210	210	200	200	200	210	200	200	...	...
9	...	...	230	220	210	210	200	210	210	200	210	...	...
10	...	...	210	220	210	210	200	200	200	200	220	...	...
11	...	...	200	210	200	190	190	210	200	210	210	...	...
12	...	...	220	210	210	210	200	200	200	200	220	...	...
13	...	...	220	200	200	200	200	200	200	210	200	...	...
14	...	...	210	210	200	200	190	200	200	200	220	...	...
15	...	...	240	220	210	210	210	200	200	210	210	...	...
16	...	...	220	210	220	210	200	200	200	210	220	...	...
17	...	...	210	210	200	200	200	210	210	210	220	...	...
18	...	...	210	210	210	200	210	210	200	210	210	...	...
19	...	...	220	210	210	200	210	200	200	210	210	...	...
20	...	...	210	200	190	190	190	190	180	210	220	...	...
21	...	...	200	200	200	200	200	190	190	200	210	...	...
22	...	...	210	210	200	200	200	200	210	200	200	...	...
23	...	...	230	200	200	200	200	200	200	200	200	...	...
24	...	...	220	220	200	200	200	200	200	200	230	...	...
25	...	...	240	220	230	230	230	210	210	210	250	...	...
26	...	...	220	200	210	210	200	210	200	220	230	...	...
27	...	...	210	210	200	200	200	200	190	210	210	...	...
28	...	...	220	200	200	200	200	190	190	190	190	...	...
29	...	...	220	200	200	210	190	200	200	200	210	...	...
30	...	...	210	210	200	190	190	200	210	210	220	...	...
31													
* MEAN	...	...	217	211	206	203	201	202	201	204	215	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 122

JUNE 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1940

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.8	1.2	1.2	1.4	1.4	1.8	1.2	1.2	1.2	1.1	0.8	0.6	...c	...c	...c	3.4	3.6	3.7	3.7	3.6	3.7	3.1	2.8	2.0	0.9
2	0.6	0.8	1.0	1.2	1.2	1.8	1.8	1.8	1.2	1.2	1.2	1.0	0.6	1.3	2.4	2.7	3.0	3.5	3.7	3.8	3.8	3.5	3.0	2.7	2.0	0.8
3	0.6	0.6	1.2	1.2	1.2	1.8	1.8	1.3	1.2	1.1	1.0	0.6	0.6	1.1	2.4	2.0	3.4	3.5	3.6	3.7	3.8	3.5	3.1	2.6	2.0	0.9
4	0.6	0.8	1.1	1.2	1.2	1.7	1.8	1.7	1.8	1.2	1.2	0.8	0.6	1.3	2.4	2.9	3.2	3.5	3.7	4.0	3.6	3.7	3.0	3.2	2.1	1.2
5	0.6	0.6	0.8	1.2	1.2	1.4	1.4	1.4	1.2	1.2	1.0	0.8	0.6	1.4	2.3	2.2	3.3	3.6	3.7	3.8	3.7	3.4	3.2	2.7	2.1	0.9
6	0.6	0.8	0.8	1.2	1.2	1.2	1.2	1.3	1.2	1.8	1.2	0.8	0.6	1.3	2.4	2.9	3.2	3.5	3.8	3.7	3.7	3.5	3.3	2.8	2.0	0.9
7	0.6	1.2	1.4	1.2	1.2	1.4	1.4	1.2	1.2	1.2	1.0	0.8	0.3	1.2	2.4	3.0	3.1	3.1	3.8	3.9	3.9	3.5	3.1	2.8	2.0	1.0
8	0.6	0.8	1.1	1.2	1.2	1.3	1.4	1.2	1.2	1.2	0.9	1.0	0.6	1.0	2.4	2.9	3.2	3.6	3.8	3.8	3.8	3.5	3.0	2.8	2.0	1.1
9	0.9	1.0	1.0	1.2	1.4	1.5	1.4	1.4	1.2	1.2	1.0	1.0	0.6	1.4	2.5	2.2	3.3	3.8	3.9	3.9	3.8	3.5	3.0	2.4	2.1	0.9
10	0.6	0.7	1.0	1.2	1.2	1.4	1.2	1.2	1.2	1.1	0.8	0.8	0.6	1.3	2.4	2.8	3.1	3.5	3.8	3.9	3.8	3.5	3.2	2.7	2.0	1.0
11	0.6	0.6	1.0	1.2	1.2	1.3	1.4	1.4	1.2	1.2	1.1	1.0	0.8	1.4	2.4	2.8	3.1	3.5	3.8	3.8	3.8	3.7	3.1	2.8	2.0	1.0
12	0.8	0.6	0.8	1.2	1.2	1.4	1.2	1.2	1.2	1.2	1.2	0.6	0.6	1.3	2.4	2.9	3.3	3.6	3.8	3.7	3.7	3.5	3.1	2.8	2.2	0.9
13	0.6	0.8	1.1	1.2	1.2	1.5	1.2	1.2	1.2	1.2	1.0	0.8	0.6	1.3	2.4	3.0	3.3	3.5	3.8	3.7	3.6	3.4	3.1	2.7	2.0	1.1
14	0.6	0.8	1.0	1.2	1.2	1.4	1.2	1.2	1.2	1.2	0.8	0.7	0.6	1.2	2.3	2.6	3.0	3.5	3.6	3.7	3.6	3.4	3.0	2.6	2.0	1.0
15	0.6	0.6	0.9	1.2	1.2	1.2	1.2	1.2	1.4	1.2	1.0	0.8	0.6	1.3	2.4	3.0	3.2	3.4	3.6	3.6	3.5	3.4	3.1	2.6	2.0	0.8
16	0.6	0.8	1.2	1.2	1.4	1.4	1.5	1.4	1.2	1.2	0.8	0.8	0.6	1.2	2.3	2.9	3.2	3.5	3.6	3.6	3.6	3.4	2.9	2.8	2.0	0.9
17	0.6	0.8	1.0	1.2	1.3	1.4	1.4	1.4	1.3	1.2	0.8	0.8	0.6	1.3	2.3	2.8	3.3	3.4	3.6	3.7	3.5	3.3	3.1	2.7	2.0	0.9
18	0.6	0.8	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.0	0.8	0.6	0.6	1.2	2.0	2.7	3.0	3.4	3.6	3.6	3.6	3.4	3.2	2.8	2.0	1.2
19	0.6	0.6	1.0	1.3	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.6	1.6	2.3	2.9	3.3	3.4	3.6	3.6	3.6	3.3	3.1	2.8	2.0	1.0
20	0.6	0.6	0.6	1.1	1.2	1.2	1.2	1.2	1.1	1.0	1.0	1.0	0.8	1.1	2.2	2.9	2.8	3.6	3.5	3.6	3.5	3.3	3.1	2.7	2.2	1.1
21	0.6	0.8	1.0	1.2	1.2	1.2	1.2	1.2	1.1	1.0	1.0	0.9	0.6	1.2	2.2	2.8	3.0	3.4	3.5	3.5	3.3	3.3	3.2	3.1	2.3	0.9
22	0.8	0.6	0.8	1.0	1.2	1.2	1.2	1.8	1.2	1.0	0.8	0.8	0.8	1.2	2.3	2.8	3.2	3.4	3.5	3.6	3.5	3.3	3.0	2.6	2.1	0.9
23	0.6	0.8	1.0	1.2	1.2	1.8	1.4	1.8	1.2	1.1	1.0	0.8	0.6	1.2	2.3	2.9	3.2	3.4	3.6	3.6	3.5	3.3	3.3	2.8	2.0	1.0
24	0.6	0.8	1.0	1.0	1.2	1.2	1.8	1.2	1.2	1.2	1.0	1.0	0.6	1.3	2.3	2.8	3.2	3.3	3.5	3.6	3.5	3.3	3.0	2.8	2.1	1.0
25	0.6	1.0	1.2	1.7	1.8	2.1	1.9	1.4	1.2	1.1	0.9	0.8	0.6	1.2	2.4	3.0	3.0	3.5	3.6	3.6	3.4	3.3	3.1	2.8	2.0	0.9
26	0.5	0.8	1.0	1.2	1.2	1.8	1.8	1.4	1.2	1.2	0.8	0.6	0.6	0.8	2.2	2.9	3.3	3.6	3.8	3.8	3.8	3.5	3.2	2.8	2.2	0.8
27	0.6	0.8	0.8	1.2	1.2	1.4	1.3	1.2	1.4	1.1	1.0	0.8	0.6	1.2	2.4	2.9	3.1	3.4	3.6	3.8	3.6	3.5	3.2	2.8	2.1	1.1
28	0.6	0.8	1.2	1.2	1.2	1.8	1.4	1.2	1.2	1.0	0.8	0.7	0.9	1.2	2.3	2.9	3.2	3.5	3.5	3.6	3.5	3.4	3.2	2.9	210	1.0
29	p0.6c	p0.8c	1.1	1.2	1.1	1.8	1.8	1.7	1.4	1.2	1.0	0.8	0.6	p1.2c	p2.3c	2.8	3.2	3.5	3.7	3.7	3.5	3.5	3.1	2.8	2.2	1.1
30	0.6	0.8	1.0	1.0	1.2	1.8	1.8	1.8	1.2	1.1	1.0	0.8	0.8	1.2	2.2	2.9	3.3	3.6	3.6	3.9	3.7	3.4	3.3	2.3	2.0	1.0
31																										
MEAN*	0.6	0.8	1.0	1.2	1.3	1.5	1.5	1.4	1.2	1.2	1.0	0.8	0.6	1.2	2.3	2.8	3.2	3.5	3.7	3.7	3.6	3.4	3.1	2.8	2.1	1.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F_2 EQUAL TO OR LESS THAN f^0F_1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 123

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1940 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JULY 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.7	5.8	4.7	4.1	3.6	3.8	4.6	6.7	8.1	8.6	8.8	8.4	8.2	8.2	8.5	8.4	8.7	8.3	7.4	6.5	7.0	8.3	6.8	6.8	7.0
2	6.4	6.0	5.6	4.5	4.2	3.3	3.8	6.8	8.7	9.0	10.0	10.0	9.1	9.6	9.0	9.2	8.8	8.5	8.6	...f	...f	...f	...f	7.2	...
3	7.2	7.1	6.3	6.1	5.6	5.0	5.1	6.4	8.0	9.2	8.4	7.6	7.5	7.8	7.8	8.0	8.4	8.0	7.3	6.4	7.0	7.4	6.0	6.9	7.1
4	7.2	7.5	6.9	5.2	6.1	5.2	5.2	6.0	8.4	8.6	7.8	8.0	8.4	9.4	8.8	9.2	9.3	8.2	7.5	6.4	p6.6f	6.8	7.2	6.6	7.4
5	5.4	5.2	5.7	4.6	4.5	3.8	3.0	5.8	7.8	8.4	8.5	8.2	8.8	8.8	8.0	8.2	8.2	7.8	7.8	7.1	7.0	7.2	7.5	7.4	6.9
6	7.0	7.5	6.7	5.5	4.5	4.2	4.5	6.3	7.8	7.9	7.5	7.3	7.2	7.8	8.4	8.0	8.4	8.8	8.6	7.5	7.5	7.6	6.2	5.8	7.0
7	5.5	6.2	6.2	5.4	4.6	3.9	4.2	6.8	8.6	8.2	8.3	8.4	7.6	7.6	8.0	8.2	7.9	8.8	8.3	7.8	7.6	7.6	7.4	6.9	7.1
8	5.6	6.0	5.2	4.6	4.2	4.0	4.5	6.7	8.2	8.8	9.2	8.8	9.0	8.8	8.0	...c	...c	...c	...c	7.6	7.3	8.0	8.0	8.0	...
9	6.4	6.1	6.2	4.9	3.6	3.2	2.9	6.8	8.4	8.5	8.2	8.6	9.3	8.8	9.2	8.8	8.8	8.8	8.6	7.5	7.7	7.2	6.8	7.4	7.2
10	6.6	6.0	5.6	p5.5f	5.5	p5.5f	5.6	7.6	8.6	9.6	9.4	9.6	9.8	9.4	8.8	8.8	8.0	8.2	8.0	7.8	8.1	8.1	7.1	5.5	7.6
11	6.9	6.2	6.5	6.0	5.0	4.1	4.4	6.6	8.1	8.8	8.4	8.4	8.6	8.8	9.1	8.4	7.8	7.3	7.0	6.0	6.1	5.4	6.7	6.6	7.0
12	5.8	6.2	6.0	5.5	p5.2f	4.8	4.8	6.8	8.5	8.6	8.4	8.3	8.8	8.8	8.3	8.0	8.4	8.2	7.4	7.2	6.5	6.1	6.6	6.9	7.1
13	6.2	6.4	6.4	5.5	6.4	6.4	3.8	6.4	7.8	8.9	10.0	10.6	9.4	8.0	7.8	8.5	8.6	8.1	7.8	7.0	7.8	8.3	6.6	6.5	7.5
14	5.8	6.2	6.8	6.2	5.4	p5.7f	5.9	7.8	9.1	9.6	9.4	9.6	8.0	8.3	8.3	8.5	8.6	8.4	8.2	8.0	8.0	8.5	8.2	7.8	7.8
15	8.0	8.2	6.2	5.4	3.3	2.8	3.4	6.2	7.9	p8.0c	p8.0c	8.0	7.9	8.9	9.6	9.6	9.2	9.2	9.0	8.2	8.6	8.8	7.6	7.6	7.5
16	6.0	6.2	5.0	4.6	4.0	3.4	3.6	5.8	7.0	7.5	7.4	7.2	7.5	7.8	7.8	8.3	8.5	8.1	7.3	6.7	6.4	7.2	7.1	6.2	6.5
17	5.3	4.8	4.7	4.0	3.9	3.3	3.8	6.4	8.3	9.0	8.7	8.2	7.7	7.8	7.8	8.2	8.3	8.0	8.0	7.5	8.8	7.8	6.6	7.2	6.8
18	6.8	6.2	6.4	5.4	5.4	5.2	4.8	7.0	8.6	9.0	8.2	8.4	8.1	8.2	8.4	8.8	8.6	8.4	8.2	7.7	7.3	7.0	6.0	6.0	7.3
19	6.0	5.6	5.4	4.8	4.0	3.7	3.8	5.9	7.2	7.2	7.4	8.2	7.8	8.7	8.8	9.0	8.6	7.9	7.0	6.4	6.0	5.7	6.3	5.9	6.5
20	7.4	7.7	6.2	4.8	4.6	3.7	3.9	6.4	7.9	8.3	7.9	7.6	7.6	8.0	8.1	8.6	8.7	8.6	8.4	8.8	8.0	8.7	8.9	7.5	7.3
21	5.6	6.4	5.2	5.2	3.8	3.0	3.4	6.8	8.5	8.4	8.0	7.8	8.0	8.2	8.2	8.6	8.4	7.5	7.2	7.2	7.0	6.3	6.0	6.7	6.7
22	6.2	5.1	5.3	4.5	4.3	...c	...c	...c	...c	7.6	8.0	8.6	9.0	8.8	8.6	9.0	8.4	8.2	7.5	7.0	7.0	6.6	6.2	7.0	...
23	8.4	8.0	6.7	5.2	4.8	4.6	4.7	6.5	8.2	9.0	9.0	8.9	8.3	8.0	8.2	7.9	8.1	8.0	7.1	7.2	6.6	7.6	7.6	7.1	7.3
24	6.9	6.8	7.2	6.6	5.6	4.8	4.5	6.6	8.2	8.0	7.0	7.2	8.3	7.6	7.6	7.8	8.2	7.7	7.8	7.1	6.2	6.4	5.7	6.0	6.9
25	5.7	5.4	5.4	4.2	3.8	3.6	4.2	p6.5c	p8.5c	8.4	8.2	8.3	8.2	8.7	9.0	8.6	8.2	7.6	7.6	7.8	6.6	6.2	6.3	6.9	6.8
26	6.8	6.4	6.6	5.9	4.7	4.0	4.0	7.6	8.8	8.7	8.0	8.3	8.4	8.6	8.0	8.1	8.0	7.6	7.6	6.7	6.9	6.8	7.0	7.0	7.1
27	6.3	5.5	4.8	p4.0c	3.2	2.2	3.2	6.1	7.2	7.6	7.3	7.3	7.0	7.5	7.4	8.0	8.3	8.0	8.1	7.1	7.3	7.6	7.2	7.5	6.5
28	6.0	6.0	6.6	6.0	4.4	3.6	3.4	6.6	8.3	8.0	8.6	7.6	7.4	7.7	7.8	8.0	8.0	7.5	7.6	7.4	7.0	6.6	7.9	7.2	6.9
29	7.6	7.2	6.6	6.7	p5.4c	4.1	4.2	p5.8c	p7.4c	9.0	8.6	8.4	p8.5c	p8.6c	8.8	9.0	8.6	8.4	8.4	7.7	8.1	8.9	7.9	6.4	7.5
30	6.8	7.4	8.0	6.2	6.0	3.6	3.8	7.1	9.8	9.4	9.4	8.0	7.8	7.8	p8.1c	8.4	8.6	9.0	8.6	8.0	8.2	6.6	7.2	8.0	7.6
31	9.0	p7.5f	6.0	5.6	5.6	4.4	4.6	6.1	7.8	8.8	8.2	8.0	7.7	8.3	8.2	8.2	8.5	7.9	7.0	6.3	6.6	6.0	6.0	5.8	7.0
*MEAN	6.6	6.4	6.0	5.2	4.7	4.1	4.2	6.6	8.2	8.5	8.4	8.3	8.2	8.4	8.3	8.5	8.4	8.2	7.8	7.2	7.2	7.2	7.0	6.8	7.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 124

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1940

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	210	220	230	230	240	240	290	240	260	300	300	300	330	370	340	280	290	240	300	300	260	240	210	200	268
2	220	220	210	230	230	230	280	220	270	270	300	300	...c	...c	...c	...c	...c	230	270	400	370	250	220	230	...
3	220	220	250	280	270	250	290	240	280	260	300	310	360	370	350	380	280	230	300	310	270	240	230	220	280
4	210	200	210	230	240	240	290	240	260	300	300	350	360	380	300	300	290	250	310	370	330	260	220	230	278
5	220	210	210	230	240	310	290	240	280	290	290	300	380	q330c	290	290	300	250	290	290	270	230	230	200	269
6	200	220	230	230	230	220	280	230	290	290	320	320	380	360	350	340	300	200	270	320	300	210	240	230	273
7	230	220	210	200	210	220	260	230	270	250	310	350	350	340	330	300	290	230	260	270	200	200	210	210	256
8	210	210	220	230	220	240	280	230	250	280	320	380	340	340	330	...c	...c	...c	...c	300	250	230	230	220	...
9	210	200	200	210	250	320	300	240	290	300	330	360	350	300	390	280	290	240	290	310	270	240	220	200	275
10	200	230	260	270	250	270	250	240	280	280	300	300	310	340	280	320	290	230	290	310	260	250	220	220	269
11	230	220	220	230	240	220	280	240	270	270	270	320	360	340	300	270	300	240	280	290	290	300	230	210	268
12	200	220	210	240	240	220	250	230	240	290	280	310	370	330	390	350	290	220	280	270	280	270	200	210	266
13	200	220	220	240	260	200	230	240	260	280	300	350	300	340	340	290	290	260	300	340	300	270	240	240	271
14	220	240	230	250	290	290	270	240	260	250	300	310	320	290	330	280	280	230	280	290	260	260	240	230	268
15	220	220	200	220	230	240	280	230	270	q290c	q310c	320	310	380	350	270	270	230	270	260	240	220	210	220	261
16	210	210	220	230	230	240	290	220	290	300	310	390	360	330	300	330	300	240	300	320	290	240	200	210	273
17	210	210	230	230	230	270	280	230	260	300	280	310	330	330	330	310	270	250	270	290	250	220	230	210	264
18	210	200	210	230	230	220	240	240	300	270	300	360	370	350	320	280	260	240	240	310	290	260	210	210	265
19	200	200	180	230	240	250	300	230	270	290	350	330	3c0	360	300	300	280	210	280	310	280	260	230	210	269
20	210	210	200	230	230	230	270	220	260	270	330	330	370	380	360	250	270	230	260	260	230	230	200	220	260
21	220	210	230	220	230	230	290	240	290	330	320	340	350	360	350	q320c	290	250	290	300	320	270	230	210	279
22	210	220	210	260	280	...c	...c	...c	...c	250	330	360	330	320	330	360	300	240	290	290	290	240	210	220	...
23	210	210	200	230	240	250	240	230	q280c	320	330	330	330	320	330	280	290	230	290	280	310	230	250	230	268
24	230	200	200	230	270	230	250	230	280	290	340	340	340	340	320	320	280	230	290	330	320	290	200	210	273
25	230	230	220	230	280	280	270	q290c	q300c	320	330	390	330	400	340	370	300	230	290	320	280	250	230	220	289
26	220	200	200	210	220	230	240	230	250	290	380	380	340	330	420	350	300	230	270	300	300	260	220	220	275
27	210	210	210	220	230	240	290	240	310	360	320	380	400	400	300	350	360	250	270	300	290	230	230	210	284
28	220	220	210	210	230	220	230	230	260	270	300	350	400	350	360	380	300	250	260	270	280	250	220	240	271
29	210	220	230	260	q250	240	q250c	q270c	q290c	q310	370	380	q380c	q390c	390	340	290	250	250	290	280	230	230	230	q285h
30	230	240	260	210	230	210	240	230	280	q280	400	370	360	390	q390c	380	300	260	300	330	340	340	270	250	295
31	220	230	260	230	260	300	300	250	300	340	380	390	380	410	350	320	310	260	300	330	310	310	250	230	301
MEAN*	214	216	219	231	243	245	270	237	275	290	319	342	352	352	339	317	292	238	281	305	284	251	224	219	273

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 125

JULY 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1940

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.5	5.0	5.2	5.0	5.1	4.9	5.1	4.5	4.4	...	...
2	...	...	4.7	5.0	5.1	5.4	...c	...c	...c	...c	...c	...	...
3	...	...	4.8	4.6	5.2	4.9	5.1	5.2	4.9	5.2	4.5	...	...
4	...	...	4.6	4.9	5.1	5.3	5.2	5.1	4.8	4.9	4.4	...	...
5	...	...	4.8	4.9	4.9	4.9	5.1	p5.0c	4.8	4.7	4.4	...	...
6	...	...	4.7	4.8	4.9	5.0	5.1	5.0	4.8	4.8	4.5	...	...
7	...	...	4.6	4.5	5.1	5.0	5.0	5.0	4.8	4.3	4.3	...	...
8	...	...	4.5	4.9	5.2	5.2	5.0	4.9	4.8	p4.6c	p4.4c	...	...
9	...	...	4.6	5.0	5.4	5.2	5.1	5.0	5.1	4.6	4.5	...	...
10	...	...	4.8	4.8	5.3	5.0	5.0	5.1	4.8	5.0	4.5	...	...
11	...	...	4.8	4.7	4.8	5.4	5.2	5.0	4.9	4.4	4.7	...	...
12	...	...	4.8	5.0	4.9	5.1	5.0	5.0	5.2	5.1	4.5	...	...
13	...	...	4.4	4.6	5.1	5.3	5.0	4.9	5.1	4.6	4.4	...	...
14	...	...	4.8	4.5	5.3	5.3	5.0	5.0	4.8	4.6	4.5	...	...
15	...	...	4.8	p4.9c	p5.0c	5.0	5.0	5.1	4.9	4.4	4.4	...	...
16	...	...	4.5	5.0	4.8	5.0	5.0	4.9	4.6	4.9	4.5	...	...
17	...	...	4.5	5.0	4.6	4.9	4.9	4.8	4.9	4.8	4.3	...	...
18	...	...	5.0	4.8	4.8	5.1	5.1	5.0	4.8	4.6	4.0	...	...
19	...	...	4.4	4.8	5.0	5.0	5.1	5.0	4.8	4.7	4.4	...	...
20	...	...	4.5	4.8	5.0	5.0	5.1	4.9	4.9	4.4	4.3	...	...
21	...	...	5.0	5.3	5.2	5.0	5.1	5.0	4.9	p4.6c	4.3	...	...
22	...	...	p4.5c	4.5	5.2	5.4	5.0	5.0	5.2	5.2	4.8	...	...
23	...	...	p5.3c	5.2	4.9	5.0	5.0	4.9	4.7	4.4	4.3	...	...
24	...	...	4.4	4.8	4.9	4.9	4.9	5.0	4.8	4.6	4.2	...	...
25	...	...	p4.5c	4.7	4.3	5.1	5.0	5.2	4.8	5.2	4.3	...	...
26	...	...	4.3	4.7	5.1	5.1	4.8	5.0	5.1	4.7	4.3	...	...
27	...	...	4.7	5.0	4.7	5.0	4.9	4.9	4.6	4.6	4.4	...	...
28	...	...	4.3	4.4	4.3	5.0	4.9	4.8	4.8	4.8	4.4	...	...
29	...	...	p4.4c	4.8	5.0	5.0	p5.0c	p4.9c	4.9	4.8	4.4	...	...
30	...	...	4.6	4.6	5.0	4.9	4.9	4.9	p4.8c	4.7	4.2	...	...
31	...	...	4.4	5.0	5.0	4.9	4.9	5.0	5.0	4.7	4.2	...	...
MEAN*	...	...	4.6	4.8	5.0	5.1	5.0	5.0	4.9	4.7	4.4	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	220	200	200	180	200	200	200	210	200	...	...
2	...	...	220	210	210	200	...c	...c	...c	...c	200	...	...
3	...	...	220	200	200	200	200	200	200	200	200	...	...
4	...	...	220	220	210	200	210	210	210	210	200	...	...
5	...	...	230	200	190	200	200	p200c	190	200	200	...	...
6	...	...	220	210	200	200	190	200	200	190	200	...	...
7	...	...	200	190	190	190	200	190	200	200	220	...	...
8	...	...	210	210	200	210	200	200	200	p210c	p220c	...	...
9	...	...	210	220	210	200	200	210	200	200	220	...	...
10	...	...	220	220	210	210	200	200	200	210	220	...	...
11	...	...	210	200	210	190	210	200	200	200	180	...	...
12	...	...	240	210	210	210	200	200	200	200	200	...	...
13	...	...	230	210	210	210	210	210	210	210	220	...	...
14	...	...	210	200	200	220	210	200	220	210	200	...	...
15	...	...	230	p220c	p210c	200	200	200	210	210	220	...	...
16	...	...	210	210	210	200	200	200	200	200	210	...	...
17	...	...	220	210	200	190	200	190	200	210	200	...	...
18	...	...	220	200	200	200	190	210	200	200	210	...	...
19	...	...	20	190	200	200	200	210	200	210	200	...	...
20	...	...	210	200	200	190	200	210	210	180	220	...	...
21	...	...	220	210	210	200	210	200	200	200	210	...	...
22	...	...	p220c	200	190	200	210	210	210	210	220	...	...
23	...	...	200	190	210	200	210	200	200	200	210	...	...
24	...	...	220	210	210	200	190	190	210	210	200	...	...
25	...	...	p220c	210	200	200	190	200	210	200	200	...	...
26	...	...	210	200	190	200	210	200	200	210	210	...	...
27	...	...	200	210	200	200	200	200	200	200	200	...	...
28	...	...	200	200	200	200	200	200	200	200	210	...	...
29	...	...	p220c	p210d	210	p200c	p200c	p200c	210	210	210d	...	...
30	...	...	p210d	p200d	210	220	220	220	p220c	220	230	...	...
31	...	...	230	230	230	210	210	200	210	230	230	...	...
MEAN*	...	...	216	206	204	201	202	202	204	205	209	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 126

JULY 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1940

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.6	0.8	1.0	1.2	1.2	1.8	1.8	1.2	1.0	0.8	0.8	0.6	1.3	2.2	2.8	3.3	3.5	3.6	3.8	3.7	3.5	3.1	2.7	2.1	0.8
2	0.6	0.8	1.1	1.8	1.4	1.4	1.4	1.2	1.1	1.0	0.8	0.9	0.6	1.2	2.4	2.9	3.3	3.4	3.6	...c	...c	...c	...c	2.7	2.2	1.1
3	0.6	0.8	1.0	1.1	1.2	1.3	1.3	1.4	1.3	1.1	1.0	1.0	0.6	1.2	2.2	2.7	3.2	3.4	3.6	3.7	3.6	3.4	3.2	2.8	2.1	1.1
4	0.6	0.6	1.0	1.2	1.5	1.8	1.8	1.8	1.5	1.2	1.0	0.8	0.6	1.3	2.4	2.9	3.2	3.4	3.6	3.7	3.6	3.5	3.2	2.8	2.2	1.2
5	0.6	0.8	1.0	1.2	1.8	1.8	1.8	p1.6c	1.3	1.2	1.0	0.8	0.6	1.0	2.3	2.8	3.2	3.4	3.6	3.7	p3.6c	3.4	3.1	2.8	2.1	0.9
6	0.6	0.8	1.0	1.1	1.3	1.4	1.4	1.2	1.2	1.0	0.8	0.6	0.6	1.4	2.3	2.9	3.2	3.4	3.5	3.6	3.5	3.4	3.0	2.9	1.3	1.4
7	0.8	0.7	0.8	1.0	1.2	1.3	1.4	1.2	1.2	1.1	1.0	0.8	0.9	1.2	2.3	2.8	3.1	3.4	3.5	3.7	3.6	3.4	3.0	2.9	2.1	1.1
8	0.6	0.8	1.0	1.2	1.2	1.5	1.8	1.2	1.1	...c	...c	...c	...c	1.2	2.4	2.8	3.2	3.8	3.7	3.7	3.6	3.4	...c	...c	...c	...c
9	0.6	0.8	1.0	1.2	1.8	1.8	p3.3b	1.8	1.8	2.1	1.1	1.0	0.6	1.4	2.4	2.9	3.2	3.5	3.7	4.0	3.7	3.5	3.4	2.8	2.2	0.8
10	0.6	1.1	1.0	1.4	1.9	2.2	1.9	1.6	1.4	1.1	0.9	0.8	0.6	1.2	2.3	2.9	3.2	3.5	3.9	3.7	3.5	3.3	3.3	2.8	2.2	1.2
11	0.6	0.6	0.6	1.2	1.8	1.8	1.8	1.4	1.8	1.1	0.8	0.6	0.5	1.3	2.3	2.9	3.2	3.8	3.6	3.8	3.6	3.7	3.2	2.8	1.8	1.0
12	0.9	0.9	1.2	1.8	1.8	2.0	2.2	1.8	1.8	1.3	1.0	0.7	0.6	1.2	2.5	3.0	3.4	3.4	3.5	3.7	3.7	3.8	3.4	3.3	2.8	2.2
13	0.8	1.9	1.2	1.9	1.9	p3.1b	1.8	1.5	1.8	1.3	1.2	1.0	0.8	1.0	1.2	2.3	2.9	3.2	3.1	3.7	3.7	3.6	3.4	3.2	2.8	2.2
14	0.6	0.9	1.2	1.1	1.2	1.3	1.4	1.3	1.2	1.2	0.9	0.7	0.8	1.2	2.3	2.9	3.1	3.6	3.6	3.6	3.6	3.4	3.2	2.8	2.1	1.0
15	0.8	1.0	1.2	p1.6c	p2.0c	2.4	2.2	1.8	2.0	1.2	1.1	1.0	0.8	1.2	2.3	2.8	p3.1c	p3.5c	3.8	3.9	3.7	3.6	3.4	2.8	2.6	1.0
16	0.8	1.0	1.2	1.2	1.2	1.8	1.4	1.4	1.0	1.1	1.2	0.8	0.9	1.3	2.2	2.8	3.2	3.4	3.6	3.7	3.6	3.4	3.1	2.8	2.1	1.1
17	0.6	1.1	1.2	1.9	1.8	1.4	1.4	1.4	1.0	1.1	0.9	0.9	0.9	1.2	2.4	2.9	3.3	3.4	3.6	3.8	3.8	3.5	3.1	2.8	2.2	1.1
18	1.0	1.2	1.2	1.4	1.8	1.4	1.4	1.4	1.2	1.1	0.8	0.8	0.6	1.2	2.3	2.9	3.3	3.5	3.6	3.6	3.6	3.4	2.9	2.8	2.2	1.2
19	0.8	1.1	1.2	1.8	1.8	1.8	1.8	1.4	1.4	1.2	0.9	0.8	0.9	1.2	2.3	2.9	3.2	3.5	3.7	3.7	3.6	3.4	3.2	2.8	2.2	1.1
20	0.6	1.0	1.1	1.4	1.8	1.8	1.4	1.4	1.2	1.1	1.0	1.2	0.8	1.2	2.3	2.9	3.3	3.5	3.7	3.8	3.7	3.5	3.2	2.9	2.2	0.9
21	0.6	0.8	1.2	1.2	1.2	1.4	1.2	1.2	1.2	1.2	1.0	0.8	0.8	1.2	2.2	2.9	3.3	3.4	3.6	3.7	3.6	3.5	3.1	2.7	2.2	1.2
22	...c	...c	...c	1.2	1.4	1.4	1.4	1.2	1.2	1.0	0.7	0.7	0.6	...c	...c	...c	3.1	3.5	3.6	3.7	3.6	3.4	3.1	2.8	2.3	1.2
23	0.6	0.7	1.0	1.0	1.3	1.2	1.2	1.2	1.2	1.2	1.0	1.1	0.6	1.2	2.3	2.3	3.1	3.7	3.6	3.6	3.6	3.4	3.1	2.8	2.3	1.0
24	0.8	0.6	1.0	1.2	1.7	1.1	1.7	1.7	1.1	1.1	1.0	0.8	0.6	1.2	2.3	2.8	3.2	3.4	3.5	3.6	3.5	3.5	3.2	2.7	2.2	1.0
25	0.8	p1.0c	p1.1c	1.2	1.8	1.8	1.3	1.7	1.2	1.2	1.0	1.0	0.8	1.2	p2.2c	p2.8c	3.2	3.5	3.6	3.7	3.6	3.4	3.1	2.7	2.1	1.0
26	0.8	1.0	1.1	1.2	1.2	1.7	1.7	1.4	1.5	1.2	1.1	0.8	0.6	1.2	2.3	2.8	3.2	3.5	3.7	3.6	3.6	3.5	3.1	2.9	1.4	1.0
27	0.7	1.3	1.2	1.2	1.2	1.2	1.4	1.3	1.2	1.2	0.8	0.7	0.6	1.2	2.2	2.8	3.1	3.5	3.7	3.7	3.7	3.4	3.1	2.7	2.2	1.0
28	0.6	1.1	1.2	1.2	1.2	2.5	1.4	1.2	1.2	1.2	1.1	2.3	0.6	1.2	2.3	2.8	3.2	3.5	3.7	3.7	3.6	4.0	3.2	2.8	3.8	1.2
29	p0.9c	p1.0c	p1.1c	1.2	1.2	1.8	p1.8c	p1.8c	1.7	1.2	1.1	0.7	0.6	p1.2c	p2.3c	p2.8c	3.2	3.5	4.1	p3.9c	p3.7c	3.5	3.2	2.5	2.2	1.2
30	0.9	1.2	2.2	1.1	1.1	1.5	1.3	1.2	p1.2c	1.2	1.0	0.6	1.1	1.2	2.4	2.9	3.4	3.5	3.8	3.7	3.8	p3.5c	3.2	2.9	2.2	1.2
31	0.6	0.8	1.0	1.0	1.3	1.3	1.5	1.4	1.4	1.1	1.1	1.0	0.6	1.1	2.2	2.7	3.2	3.6	3.7	4.0	3.7	3.6	3.0	2.8	2.2	1.0
MEAN*	0.7	0.9	1.1	1.3	1.5	1.7	1.6	1.5	1.3	1.2	1.0	0.9	0.7	1.2	2.3	2.8	3.2	3.5	3.6	3.7	3.6	3.5	3.2	2.8	2.2	1.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 127

AUGUST 1940 — AUGUST 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.1	p5.2f	4.3	3.4	2.2	2.2	2.6	5.8	7.4	7.9	7.0	6.6	7.0	7.8	8.1	7.9	7.5	7.5	7.4	6.9	7.6	7.0	7.6	6.7	6.2
2	6.0	6.0	5.6	4.8	3.9	3.1	3.5	6.4	7.8	7.6	7.8	7.9	8.4	7.8	7.6	6.8	7.5	6.5	7.9	7.2	6.8	7.5	6.6	6.8	6.7
3	7.7	7.0	6.0	4.9	4.0	3.7	4.2	6.7	8.1	9.0	9.5	10.4	10.0	9.7	6.6	8.8	9.0	8.8	8.6	p8.6c	[illegible]	9.5	8.5	7.7	7.8
4	7.9	7.7	6.7	6.2	5.5	5.5	5.5	5.6	6.7	6.9	6.8	7.0	7.7	7.8	6.0	7.8	8.0	8.6	6.2	8.4	6.5	8.1	7.4	7.0	7.2
5	6.1	6.0	5.8	5.3	3.8	3.4	4.0	7.2	8.0	8.3	7.7	7.6	6.2	8.4	7.8	6.5	6.8	8.8	8.3	7.8	[illegible]	7.3	6.4	5.8	7.0
6	6.1	6.0	6.5	5.7	4.4	4.1	4.9	7.5	8.9	9.6	9.4	9.7	6.5	6.8	8.4	6.8	6.1	6.2	6.4	7.6	7.4	7.8	7.4	6.1	7.4
7	6.2	5.0	4.6	4.0	2.4	1.6	3.8	6.6	8.8	9.6	9.0	9.3	6.7	8.8	9.0	9.1	9.3	9.5	8.6	7.3	6.6	...f	...f	...f	...
8	...f	6.6	p6.0f	5.4	4.1	4.2	3.2	6.5	8.2	8.0	7.5	7.0	7.4	8.0	7.6	7.5	8.0	8.0	7.6	7.2	7.0	6.2	5.8	6.1	...
9	6.0	5.2	4.8	4.6	4.4	3.6	4.2	6.8	6.2	9.4	9.8	10.0	8.2	7.7	8.2	6.4	8.6	9.4	9.5	9.8	9.8	8.2	8.6	8.0	7.6
10	7.4	7.2	6.4	6.2	5.8	5.6	6.0	7.4	9.2	10.6	10.3	10.2	6.8	8.4	6.8	8.7	6.8	8.2	7.9	7.4	6.8	6.0	7.5	6.6	7.6
11	6.6	6.8	6.0	4.9	4.4	3.8	4.8	7.6	8.4	9.2	9.1	8.4	8.8	8.4	8.8	9.1	8.9	8.5	6.5	7.8	7.6	9.2	10.0	8.0	7.6
12	7.3	7.0	6.6	5.7	4.8	3.8	4.4	7.2	9.6	10.4	10.7	10.9	10.5	9.8	9.4	9.6	9.2	9.4	9.0	7.8	7.6	7.9	[illegible]	7.8	6.1
13	7.0	6.8	6.2	6.4	5.5	4.8	4.9	6.8	8.4	8.6	8.8	9.6	8.8	9.2	9.0	6.6	8.6	7.7	7.9	7.2	7.3	7.6	7.9	7.0	7.5
14	7.2	6.6	6.2	5.4	3.8	2.4	3.7	7.0	9.2	9.6	9.4	9.5	9.7	9.5	8.8	9.2	8.8	9.8	9.5	8.8	7.9	p7.9f	p7.8f	7.8	7.7
15	8.3	7.4	6.4	5.5	4.8	3.5	4.0	6.8	8.6	8.9	8.7	9.0	8.6	8.2	9.0	8.7	8.6	9.0	8.8	8.2	7.6	7.3	7.2	6.4	7.5
16	6.8	7.3	7.4	6.0	5.2	4.5	5.3	7.6	8.8	9.4	8.6	8.0	8.0	7.8	8.0	8.0	6.1	9.0	9.0	8.6	7.9	8.7	6.3	7.4	7.7
17	7.0	6.8	6.4	4.0	2.8	2.1	3.8	6.5	8.0	8.4	8.0	7.6	8.0	7.8	8.1	...c	...c	...c	...c	...c	...c	7.9	7.2	7.6	...
18	7.5	7.8	8.3	5.8	4.4	3.2	4.3	6.8	8.4	8.8	7.8	7.3	7.6	7.6	8.2	9.1	9.2	8.8	8.0	7.7	8.4	p8.4c	8.4	7.3	7.5
19	6.8	7.0	7.3	6.1	4.0	3.5	3.8	6.4	7.7	p8.4c	9.1	8.6	8.6	8.8	8.2	9.2	9.0	9.0	9.0	8.0	p8.8f	9.0	9.7	8.6	7.7
20	7.0	7.0	7.0	6.6	5.6	5.0	5.5	6.8	8.4	8.8	8.6	8.8	9.2	9.1	9.2	9.4	9.8	10.0	9.6	7.4	p7.6c	p7.8c	8.0	9.1	8.0
21	8.8	8.7	9.3	7.8	5.6	5.3	5.5	10.4	8.4	8.4	8.1	8.6	8.8	8.7	8.2	8.0	8.4	8.0	8.8	8.4	7.7	6.8	6.4	[illegible]	8.0
22	8.4	7.3	5.6	5.2	5.0	4.6	5.3	7.2	8.7	8.8	p8.6c	8.4	8.4	8.4	8.8	8.4	8.8	8.9	8.6	7.8	7.6	7.9	6.4	7.9	7.6
23	6.8	6.1	4.8	4.1	3.2	3.2	3.8	7.0	9.0	9.7	9.4	9.2	9.6	6.9	9.6	10.2	9.6	8.4	8.2	7.4	7.0	7.1	7.8	7.0	7.4
24	6.2	6.6	6.1	5.2	4.6	4.1	4.6	6.9	9.0	9.2	8.2	8.0	7.9	8.2	9.0	8.4	9.1	8.4	8.4	7.1	6.6	6.5	p6.9f	p7.4f	7.2
25	7.8	6.8	p5.6f	4.5	3.6	3.4	4.4	7.4	9.7	10.4	10.6	10.0	9.2	8.9	9.0	9.2	9.6	9.4	9.2	9.2	9.5	10.0	9.3	9.2	8.2
26	8.0	8.4	6.6	6.4	5.4	5.1	5.5	7.6	9.5	9.6	9.8	10.1	10.4	10.3	...c	...c	...c	...c	8.4	8.4	p8.9	9.4	9.0	7.0	...
27	6.0	6.0	6.5	5.9	5.8	5.5	6.2	7.4	9.2	p9.4c	p9.6c	p9.8c	10.0	10.4	10.6	9.5	9.0	p8.6c	8.1	9.0	8.0	p7.4f	p6.8f	p6.2f	7.9
28	5.7	6.3	6.0	5.1	3.8	3.5	5.0	8.0	9.2	9.8	9.6	p9.5c	p9.4c	9.4	9.4	p9.6c	9.6	9.5	8.4	7.5	7.4	p7.4f	p7.4f	7.4	7.7
29	p6.7f	6.1	p5.8f	p5.5f	5.2	4.8	5.4	7.7	9.6	10.0	p9.8c	p9.8c	9.6	9.4	9.2	9.7	9.3	8.7	8.3	7.2	6.4	p6.8f	7.3	p7.0f	7.7
30	6.7	6.0	5.2	4.4	3.9	3.2	4.4	7.5	8.8	9.2	9.2	9.6	10.0	10.2	p10.5c	10.8	10.6	10.3	9.1	6.6	p7.4f	8.1	8.8	11.1	8.0
31	10.3	8.6	6.8	5.6	4.8	4.4	5.4	7.8	9.0	9.6	9.8	9.6	9.3	9.2	9.9	10.5	10.0	9.7	9.2	6.4	p6.9f	p7.4f	p7.9f	8.4	8.2
MEAN*	7.1	6.8	6.2	5.4	4.4	3.9	4.6	7.1	8.6	9.1	8.9	8.9	8.8	8.8	8.8	8.9	8.9	8.8	8.6	7.8	7.7	7.8	7.8	7.5	7.5

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 128

AUGUST 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1940

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	250	240	220	270	280	310	250	300	320	390	400	400	420	370	370	280	270	300	300	250	220	230	230	295
2	240	230	230	230	230	260	300	250	320	320	380	450	390	380	410	300	370	250	270	320	320	270	240	250	300
3	230	230	220	230	300	330	270	250	280	300	320	360	330	320	400	290	300	250	280	310	280	250	230	220	282
4	220	250	250	260	270	220	290	250	320	370	370	420	420	390	390	300	300	260	280	280	260	230	230	220	294
5	220	240	250	250	250	250	300	260	300	310	350	400	390	360	310	260	250	240	260	310	290	250	220	220	282
6	220	230	230	230	230	270	260	250	270	q310c	350	370	360	400	320	270	280	260	290	330	280	240	210	230	279
7	220	220	240	250	220	260	270	240	300	310	340	380	380	370	330	280	310	270	310	380	360	380	290	250	298
8	270	260	260	260	290	300	350	290	300	340	450	440	480	430	360	300	330	260	270	380	320	260	240	220	319
9	240	230	250	280	250	240	270	260	280	310	330	370	400	430	370	300	320	270	300	280	240	230	220	230	288
10	230	240	270	280	300	350	300	280	300	300	300	380	370	300	420	380	320	250	290	370	340	260	220	220	304
11	210	210	200	210	240	230	250	250	290	300	320	350	430	330	360	370	320	270	290	340	290	260	220	230	282
12	230	230	240	260	230	250	270	230	270	280	340	340	350	320	410	370	320	270	300	330	320	240	230	230	286
13	230	240	240	240	250	250	270	220	270	310	370	390	370	470	430	400	320	260	310	350	310	270	230	240	302
14	230	240	230	230	240	230	290	240	290	350	370	410	400	400	390	420	330	260	290	350	360	330	270	230	308
15	220	230	220	230	220	260	320	240	310	370	330	390	420	410	450	370	320	260	300	310	300	270	230	220	300
16	230	280	200	220	240	270	280	240	310	370	390	390	440	420	430	350	290	260	280	300	270	230	210	240	298
17	230	240	220	220	230	260	310	260	340	330	380	460	430	380	300	...c	...c	...c	...c	...c	...c	250	250	200	...
18	200	200	200	200	210	200	290	220	310	q320c	c340c	q360c	380	390	330	320	330	260	290	290	230	210	210	220	271
19	220	220	220	210	240	270	300	250	290	q310c	330	350	380	390	300	310	280	260	300	370	340	230	220	220	264
20	230	240	250	270	290	300	300	260	280	300	320	360	310	310	320	290	280	260	290	440	330	310	230	220	291
21	220	230	220	220	240	240	280	230	280	300	290	330	350	340	340	240	260	250	290	350	320	270	220	210	[illegible]
22	220	210	220	250	250	280	280	240	280	310	q300c	290	280	320	340	270	290	250	300	320	280	200	210	210	[illegible]
23	220	210	220	230	240	250	300	250	260	290	300	340	360	330	300	290	290	240	290	350	290	240	230	220	[illegible]
24	230	220	220	210	230	240	280	240	270	330	320	290	330	400	380	280	370	250	[illegible]	360	330	300	240	230	[illegible]
25	[illegible]	220	220	[illegible]	250	260	280	240	270	290	330	390	360	350	330	310	330	260	[illegible]	310	270	240	210	210	[illegible]
26	240	230	240	240	250	290	300	260	300	300	310	340	350	320	...	...	...	...	300	280	240	230	210	[illegible]	...
27	230	240	240	260	290	280	280	240	290	q300c	q310c	q300c	300	300	360	320	290	260	300	320	280	270	210	220	[illegible]
28	230	230	220	200	240	240	280	240	280	300	300	q320c	q350c	380	300	q300c	300	270	[illegible]	340	330	350	210	200	[illegible]
29	260	250	240	240	250	250	290	250	300	290	q310c	q340c	370	360	350	400	320	270	310	370	470	320	210	230	[illegible]
30	220	230	230	240	240	270	290	240	300	320	300	300	360	340	q320c	300	300	260	310	420	330	260	240	220	[illegible]
31	220	220	230	230	250	250	290	250	290	320	310	340	350	340	300	300	300	270	330	500	330	280	[illegible]	240	[illegible]
MEAN*	227	232	231	236	249	262	289	247	292	317	337	366	377	368	357	319	307	259	295	342	305	264	230	[illegible]	[illegible]

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 129

AUGUST 1940 AUGUST 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.5	4.7	4.9	4.9	4.8	4.9	4.7	4.7	3.9	...	...
2	...	...	4.7	4.8	4.8	5.0	4.8	4.8	4.9	4.4	4.8	...	...
3	...	...	4.6	4.7	5.2	5.0	4.9	4.7	5.0	4.6	4.4	...	...
4	...	...	4.8	4.8	5.0	5.2	5.2	5.1	5.0	4.5	4.4	...	...
5	...	...	4.9	5.0	5.1	5.3	5.2	5.1	4.8	4.5	3.8	...	...
6	...	...	4.6	p4.8c	5.0	5.2	5.2	5.2	4.8	4.5	4.3	...	...
7	...	...	4.8	5.0	5.0	5.2	5.1	5.1	4.8	4.4	4.5	...	...
8	...	...	4.5	4.7	5.2	5.1	5.1	5.0	4.8	4.5	4.4	...	...
9	...	...	4.8	4.9	5.2	5.0	5.2	5.2	4.9	4.5	4.3	...	...
10	...	...	4.9	5.0	5.0	5.2	5.2	4.9	5.1	4.8	4.6	...	...
11	...	...	4.8	5.0	4.9	5.2	5.4	4.9	5.0	4.8	4.4	...	...
12	...	...	4.8	4.8	5.0	5.3	5.1	5.0	5.2	5.2	4.8	...	...
13	...	...	4.7	5.0	5.0	5.1	5.1	5.4	5.1	5.0	4.7	...	...
14	...	...	4.8	5.1	5.0	5.1	5.2	5.1	4.9	5.0	4.4	...	...
15	...	...	4.8	5.2	5.0	5.1	5.2	5.1	5.1	5.0	4.4	...	...
16	...	...	4.8	5.3	5.0	5.1	5.2	5.2	5.1	4.7	4.4	...	...
17	...	...	5.0	5.0	5.0	5.4	5.2	5.1	5.0	p4.7c	p4.4c	...	...
18	...	...	4.8	p4.9c	p5.0c	5.2	5.0	5.1	4.8	4.8	4.6	...	...
19	...	...	4.8	p5.0c	5.1	5.1	5.2	5.2	4.7	4.6	4.4	...	...
20	...	...	4.8	5.1	5.4	5.4	5.0	5.0	5.0	4.8	4.4	...	...
21	...	...	4.8	5.1	4.9	5.2	5.2	5.0	4.9	4.4	4.0	...	...
22	...	...	4.8	5.2	p5.0c	4.9	5.3	5.0	4.9	4.3	4.4	...	...
23	...	...	4.6	5.0	5.0	5.2	5.2	5.0	4.8	4.7	4.5	...	...
24	...	...	4.5	5.2	5.0	4.9	5.1	5.4	5.2	4.7	4.0	...	...
25	...	...	4.6	4.9	5.0	5.2	5.2	5.0	4.9	4.5	4.9	...	...
26	...	...	4.8	5.0	5.3	5.1	5.1	5.0	p4.9c	p4.7c	p4.5c	...	...
27	...	...	4.7	p4.8c	p4.9c	p5.0c	5.0	4.9	5.2	4.9	4.2	...	...
28	...	...	4.8	5.0	5.2	p5.2c	p5.2c	5.2	4.9	p4.7c	4.4	...	...
29	...	...	4.9	4.9	p5.0c	p5.0c	5.1	5.1	5.0	5.0	4.8	...	...
30	...	...	4.8	5.2	5.0	5.0	5.3	5.1	p4.9c	4.8	4.4	...	...
31	...	...	4.8	5.3	5.0	5.2	5.2	5.1	4.7	4.8	4.6	...	...
* MEAN	...	...	4.8	5.0	5.0	5.1	5.1	5.1	4.9	4.7	4.4	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	210	230	220	220	210	210	220	220	210	...	...
2	...	...	230	230	220	220	230	210	200	200	240	...	...
3	...	...	230	220	220	220	200	190	200	210	230	...	...
4	...	...	220	230	230	210	210	210	210	200	230	...	...
5	...	...	220	220	230	210	210	200	210	210	200	...	...
6	...	...	230	p220c	220	210	210	210	210	210	220	...	...
7	...	...	230	230	230	220	210	210	210	210	230	...	...
8	...	...	230	230	220	220	220	200	200	220	230	...	...
9	...	...	230	220	220	210	220	210	220	230	230	...	...
10	...	...	230	230	220	220	210	210	220	230	240	...	...
11	...	...	230	220	220	220	200	200	200	220	230	...	...
12	...	...	210	220	220	230	200	210	200	230	230	...	...
13	...	...	230	200	220	210	200	210	220	220	230	...	...
14	...	...	230	220	200	220	200	210	220	220	230	...	...
15	...	...	240	230	p220b	220	230	220	210	220	220	...	..
16	...	...	240	230	220	220	210	200	200	210	210	...	...
17	...	...	240	230	210	230	210	200	220	p220c	p230c	...	...
18	...	...	230	p230c	p220c	p220c	220	200	210	230	220	...	...
19	...	...	230	p220c	210	210	210	210	200	200	210	...	...
20	...	...	230	220	210	220	210	210	200	210	210	...	...
21	...	...	220	220	210	210	210	210	210	200	200	...	...
22	...	...	220	220	190	210	210	200	200	200	210	...	...
23	...	...	230	220	210	210	210	200	210	210	200	...	...
24	...	...	230	220	210	190	200	200	210	200	200	...	...
25	...	...	230	220	210	200	210	200	210	200	210	...	...
26	...	...	240	230	220	210	210	210	p210c	p220c	p230c	...	...
27	...	...	210	p210c	p210c	p220c	230	210	210	220	230	...	...
28	...	...	240	230	230	p220	p210	210	230	p230c	230	...	...
29	...	...	240	220	p220c	p210c	210	210	200	210	220	...	...
30	...	...	230	230	220	200	210	210	p210c	220	230	...	...
31	...	...	240	230	220	200	200	200	200	220	250	...	...
* MEAN	...	...	229	224	217	214	211	206	209	215	222	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 130

AUGUST 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1940

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.8	1.2	1.2	1.3	1.3	1.8	1.8	1.7	1.2	1.2	1.0	0.8
2	0.6	0.8	1.0	1.2	1.8	1.8	1.7	1.2	1.2	1.2	1.0	0.8	0.6
3	1.0	0.8	1.2	1.2	1.3	1.8	1.8	1.8	1.8	1.7	1.5	1.6	1.5
4	0.6	0.6	0.9	1.2	1.8	1.8	1.8	1.4	1.7	1.3	1.2	1.0	0.8
5	0.8	0.8	1.1	1.2	1.4	1.8	1.8	2.0	1.8	1.2	0.8	0.6	0.8
6	0.8	0.6	1.2	1.2	1.4	1.4	1.5	1.8	1.9	1.2	1.0	0.8	0.8
7	0.6	0.6	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.0	0.8	0.8
8	0.9	0.8	1.2	1.3	1.9	1.8	1.8	0.7	1.2	1.2	1.0	0.8	0.9
9	0.6	0.9	0.8	1.8	1.8	1.9	1.9	1.9	1.8	1.4	1.2	1.0	0.8
10	0.6	1.0	1.1	1.4	1.7	1.5	1.6	1.4	1.2	1.3	1.2	0.8	0.8
11	0.6	0.8	1.2	1.4	1.4	1.9	1.8	1.8	1.8	1.5	1.2	0.9	0.8
12	0.6	1.0	1.8	2.4	1.9	2.1	2.3	2.2	1.9	1.8	1.2	1.0	0.8
13	0.5	1.8	1.0	1.2	1.8	2.2	2.0	1.9	1.4	2.0	1.5	1.0	0.8
14	0.8	0.8	1.3	1.4	1.4	1.9	2.3	1.5	1.3	1.2	1.2	0.9	0.8
15	0.6	0.8	1.2	2.1	3.1	2.8	2.5	2.7	2.4	1.2	1.2	1.0	0.8
16	0.6	1.0	1.2	1.2	1.4	1.8	1.8	1.9	2.0	1.8	1.3	1.2	0.8
17	0.6	0.8	1.0	1.0	1.2	1.8	1.8	1.8	2.0	...c	...c	...c	...c
18	0.5	0.7	1.0	1.4	2.4	p4.4b	2.8	2.8	2.5	1.4	1.2	0.8	0.8
19	0.5	0.8	1.1	p2.2c	p3.3c	2.7	2.8	2.8	2.8	2.5	1.4	1.2	0.8
20	0.6	0.8	1.0	1.3	2.8	2.8	2.8	2.8	2.8	1.4	1.2	0.8	0.7
21	0.5	0.8	1.0	1.2	2.5	2.8	2.8	2.5	2.3	1.2	1.0	0.8	0.8
22	0.6	0.7	0.8	1.0	p1.7c	2.3	2.0	1.9	2.3	2.2	1.0	1.0	0.8
23	0.6	0.8	1.2	2.8	2.8	2.4	2.8	2.7	2.8	2.8	1.2	0.8	0.6
24	0.8	1.1	1.2	1.5	2.8	2.8	2.8	2.8	1.8	1.2	1.2	0.8	0.7
25	0.7	0.8	1.2	2.8	2.7	2.8	2.8	2.8	2.8	2.5	1.2	0.8	0.7
26	0.6	0.7	0.9	2.8	2.8	2.8	2.8	2.8	...c	...c	...c	...c	0.8
27	0.5	0.8	0.8	p0.9c	p1.2c	p1.4c	1.7	1.2	2.8	2.8	1.2	1.6	0.8
28	0.6	0.8	1.1	2.1	2.5	p2.0	p1.6	1.2	2.5	p1.8c	1.1	1.1	0.6
29	0.9	0.8	2.3	2.4	p2.7c	p3.0c	3.3	2.8	2.7	2.4	1.2	1.1	0.8
30	0.6	0.6	1.1	1.4	3.0	2.2	2.0	2.1	p2.0c	1.8	1.2	0.8	0.8
31	0.6	0.8	1.1	1.8	2.2	3.3	2.3	2.2	1.8	1.7	1.4	0.8	0.9
* MEAN	0.6	0.8	1.1	1.6	2.0	2.2	2.1	2.0	2.0	1.7	1.2	1.0	0.8

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	2.4	2.6	3.1	3.5	3.6	3.8	3.8	3.6	3.0	2.9	2.2	1.2
2	1.2	2.3	2.9	3.1	3.5	3.8	3.7	3.6	3.5	3.2	3.1	2.2	1.0
3	1.1	2.3	3.0	3.1	4.0	3.8	3.8	3.8	3.7	3.4	3.1	2.3	1.5
4	1.2	2.3	2.7	3.4	3.8	4.1	3.8	4.0	3.6	3.3	2.9	2.2	1.2
5	1.3	2.4	3.1	3.3	3.6	3.8	3.9	3.8	3.7	3.4	2.9	2.5	1.1
6	1.3	2.4	3.0	p3.4c	3.7	3.8	4.0	4.0	3.7	3.4	2.8	2.3	1.2
7	1.3	2.4	3.0	3.3	3.5	3.8	3.8	3.9	3.8	3.4	2.7	2.3	1.2
8	1.4	2.3	2.9	3.3	3.6	3.9	3.9	3.9	3.8	3.4	3.0	2.2	1.2
9	1.4	2.4	3.0	3.4	3.5	3.8	4.0	3.9	3.8	3.4	3.0	2.3	1.1
10	1.4	2.5	3.0	3.8	3.8	3.9	4.0	3.9	3.7	3.4	3.0	2.4	1.2
11	1.3	2.5	3.1	3.3	3.8	4.0	4.0	3.9	3.8	3.5	3.0	2.4	1.2
12	1.4	2.4	3.2	3.5	3.8	4.1	3.2	4.0	3.8	3.5	3.0	2.4	1.2
13	1.4	2.5	2.6	3.4	3.8	4.0	4.0	4.0	3.8	3.6	3.0	2.4	1.2
14	1.4	2.5	3.0	3.4	3.7	4.0	4.0	4.0	3.8	3.4	2.9	2.4	1.2
15	1.3	2.6	3.2	3.7	3.6	4.3	4.4	4.4	4.0	3.6	3.0	2.4	1.3
16	1.5	2.5	3.1	3.5	3.8	4.1	4.0	4.2	3.8	3.5	3.0	2.4	1.3
17	1.3	2.6	2.3	3.5	3.8	4.0	4.0	4.2	3.9	...c	...c	...c	...c
18	1.4	2.6	3.2	3.6	3.9	4.4	4.1	4.0	3.6	3.9	2.8	2.4	0.8
19	1.6	2.6	2.8	p3.3c	3.8	3.9	4.0	4.0	3.7	3.4	3.0	2.6	1.4
20	1.3	2.6	3.2	3.4	3.7	3.9	4.0	4.0	3.8	3.3	3.2	2.5	1.4
21	1.8	2.8	3.2	3.4	3.8	4.2	4.0	4.0	3.6	3.3	3.0	2.5	1.2
22	1.4	2.6	3.0	3.4	p3.7c	4.0	3.9	3.8	3.6	3.2	3.0	2.5	1.2
23	1.2	2.4	3.1	3.4	3.6	4.1	3.9	3.8	3.6	3.4	3.1	2.4	1.2
24	1.3	2.6	3.1	3.4	3.7	3.7	3.8	3.8	3.6	3.3	3.1	2.8	1.2
25	1.3	2.6	3.2	3.7	3.7	3.8	3.8	3.8	3.6	3.3	3.2	2.6	1.2
26	1.3	2.8	3.2	3.4	3.7	3.8	4.0	3.8	...c	...c	...c	...c	1.2
27	1.8	2.6	3.1	p3.0c	p2.8c	p2.6c	2.5	2.4	4.0	3.8	3.1	2.5	1.4
28	1.7	2.7	3.2	3.7	4.0	p4.0c	p4.0c	4.1	3.8	p3.4c	3.1	2.4	1.2
29	1.8	2.7	3.2	3.7	p3.9c	p4.1c	4.2	4.2	4.1	4.1	3.0	2.4	1.2
30	1.7	2.4	2.8	3.8	4.1	4.2	4.2	4.1	p3.8c	3.5	2.8	2.4	1.2
31	1.7	2.7	3.1	3.4	3.8	4.0	4.0	3.9	3.7	3.4	3.1	2.5	1.2
* MEAN	1.4	2.5	3.0	3.4	3.7	3.9	3.9	3.9	3.7	3.4	3.0	2.4	1.2

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 131

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1940 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND SEPTEMBER 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.8	6.4	4.6	3.6	4.6	p5.0f	5.4	8.0	10.2	11.6	12.0	12.2	12.6	12.6	11.7	11.4	11.3	11.2	10.6	10.1	p9.2f	8.4	8.2	7.8	9.0
2	8.1	7.5	p7.0f	6.4	5.8	6.2	6.8	8.4	9.6	9.7	9.2	9.2	p9.4c	p9.6c	9.8	10.6	10.5	9.8	...c	...c	...f	...f	7.6	8.2	...
3	6.0	5.6	5.1	5.3	4.4	4.4	5.6	8.8	10.2	11.2	10.9	10.0	9.6	9.7	10.0	10.1	10.2	9.9	9.6	8.8	8.8	9.1	8.8	7.8	8.3
4	8.9	7.4	6.4	6.1	4.1	3.1	5.2	8.7	10.4	10.9	10.1	9.0	9.2	9.2	9.7	9.7	9.9	10.4	10.5	9.7	9.6	10.2	9.6	8.6	8.6
5	8.0	7.4	7.0	5.2	4.4	4.0	6.0	9.0	9.8	10.8	10.4	10.2	9.3	9.8	10.0	10.0	10.3	10.4	10.3	9.5	8.6	8.9	9.5	9.0	8.6
6	p8.5f	8.0	6.6	5.8	5.0	4.0	5.6	8.8	10.5	10.6	9.7	...c	...c	...c	...c	...c	...c	10.5	10.5	9.7	9.9	11.0	10.1	8.8	...
7	8.8	8.9	8.2	8.0	p5.9f	p4.2f	p5.5f	11.0	10.9	10.8	10.9	10.8	10.6	10.6	10.3	10.0	10.2	10.0	9.3	8.2	8.6	9.6	8.8	8.4	9.1
8	8.0	8.6	8.2	7.4	5.8	3.6	5.2	8.6	10.0	11.3	11.6	11.8	11.5	11.2	11.4	11.2	11.2	11.7	10.3	9.4	8.6	p8.3f	p8.0f	p7.7f	9.2
9	7.4	7.6	6.4	5.6	4.2	3.6	5.8	8.8	10.3	11.4	11.4	11.0	9.9	10.0	p9.4c	8.8	p8.9c	9.0	8.6	p8.8	p9.0	p9.4	p8.9	p9.0	8.5
10	p8.0	p7.0	p6.0	p5.4	p4.8	p4.2	4.9	8.4	10.2	10.9	11.2	10.4	10.1	10.3	9.8	9.8	9.0	8.8	8.7	8.3	8.2	p8.1f	p7.9f	7.7	8.3
11	8.3	9.2	6.5	4.0	3.8	2.6	4.8	7.8	9.2	9.6	9.4	9.4	8.9	9.1	9.4	9.4	8.8	9.7	7.8	7.0	6.8	7.4	7.3	7.2	7.6
12	6.7	p6.1f	5.5	5.1	5.0	4.9	4.4	7.6	8.6	8.4	8.9	9.2	9.4	9.6	9.6	9.8	9.2	8.7	8.8	8.2	8.2	p8.1f	p8.0f	p7.9f	7.8
13	7.8	8.0	7.2	5.6	4.3	3.6	4.9	7.6	8.8	9.7	9.6	9.0	9.3	9.5	9.5	9.6	9.2	8.9	8.4	6.6	p6.6f	p6.6f	6.7	p7.8f	7.7
14	8.9	7.0	5.9	4.4	3.5	2.6	5.0	8.0	8.9	8.7	8.1	8.1	8.8	9.2	9.1	9.2	10.2	11.2	10.3	8.6	7.9	9.1	10.4	10.4	8.1
15	9.3	8.0	7.2	6.6	5.2	4.7	5.0	8.5	10.0	10.0	9.4	9.4	9.4	9.6	9.7	9.5	9.7	9.8	9.3	8.3	...f	...f	...f	...f	...
16	...f	...f	6.5	6.4	5.7	4.2	5.7	8.6	10.0	9.8	8.3	8.8	9.3	9.6	9.9	9.7	9.7	9.8	10.1	9.8	9.4	9.2	8.8	p8.6f	...
17	8.4	7.1	5.6	4.6	4.3	3.8	5.8	8.8	10.6	10.8	9.4	9.0	8.8	9.2	9.6	9.6	9.9	9.9	9.6	8.2	...f	...f	...f	...f	...
18	...f	6.5	5.0	4.8	3.4	2.8	5.5	9.0	10.0	11.3	10.8	9.5	9.6	10.6	10.8	10.4	10.6	10.4	9.4	...f	...f	...f	...f	...f	...
19	...f	...f	...f	4.2	3.4	2.9	p5.7c	8.5	10.2	11.4	11.0	10.0	9.2	9.2	9.2	9.6	10.1	9.9	9.3	8.5	p8.4f	8.3	8.0	p7.9f	...
20	7.8	7.8	6.8	6.0	5.6	4.6	6.4	10.1	11.0	11.2	10.9	9.9	10.0	10.7	10.0	10.6	10.3	9.8	9.7	10.2	...c	...c	...c	...c	...
21	...c	...c	...c	...c	...c	5.4	p7.3c	p9.1c	10.9	p11.4	11.8	11.5	9.8	9.5	9.8	10.1	9.3	10.2	10.0	8.9	...f	...f	...f	...f	...
22	...f	8.0	6.1	4.8	3.6	2.9	6.2	9.6	11.4	p11.2	p11.0	10.7	11.0	10.9	11.2	11.2	11.0	10.9	10.8	9.8	9.2	9.9	9.5	8.7	...
23	8.0	p7.0f	p6.0f	5.0	4.9	4.6	7.0	9.8	11.2	p11.4	p11.6	p11.8	12.0	11.6	11.4	11.2	10.7	10.0	9.7	...f	...f	...f	...f	...f	...
24	7.8	7.5	6.7	6.0	5.8	4.9	7.2	9.9	11.8	p12.0	p12.2	12.4	11.3	11.4	11.3	10.9	10.6	9.9	10.0	9.4	p9.4f	p9.3f	9.2	9.0	9.4
25	8.4	6.6	5.3	5.4	p4.8f	p4.2f	p7.0f	9.8	12.1	13.8	13.3	10.8	9.8	9.0	10.0	10.7	10.7	10.2	9.6	8.6	9.0	9.5	9.9	9.4	9.1
26	8.8	8.0	7.3	6.5	5.7	4.8	7.2	10.0	11.6	...c	...c	...c	...c	...c	...c	...c	11.4	11.8	11.0	11.1	11.2	11.9	p11.8c	11.8	...
27	10.3	8.8	8.6	8.9	9.0	8.4	9.8	11.8	p11.8	p11.8c	11.9	11.2	10.9	10.7	p10.6c	p10.4c	10.3	10.6	10.3	9.2	8.8	9.8	9.5	9.3	10.1
28	7.9	7.4	6.8	6.4	6.8	p4.2f	p7.1f	10.0	11.0	11.9	11.6	11.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
29	...c	...c	...c	...c	...c	...c	...c	...c	...c	11.2	10.8	p10.9c	11.0	11.4	11.8	11.9	11.0	11.0	10.6	9.1	...f	...f	...f	...f	...
30	8.9	8.4	6.6	6.6	4.7	3.7	6.4	9.7	11.0	11.4	10.4	10.1	10.3	10.2	10.8	11.0	11.0	11.0	11.0	10.3	...f	...f	...f	...f	...
31																									
MEAN*	8.2	7.5	6.5	5.7	5.0	4.2	6.0	9.1	10.4	10.9	10.6	10.3	10.0	10.1	10.2	10.2	10.2	10.2	9.8	9.0	8.8	9.1	8.9	8.6	8.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 132

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1940 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — SEPTEMBER 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	230	250	260	290	290	290	260	290	310	320	320	310	330	270	290	300	270	300	350	250	270	240	230	281
2	230	240	260	240	260	250	290	240	300	300	270	q270c	q280c	q290c	290	300	300	320	q330c	q340c	360	240	230	230	278
3	230	260	260	290	290	290	280	240	290	300	300	300	300	320	300	290	300	250	300	340	300	250	230	230	281
4	230	230	250	230	240	240	260	250	280	300	340	300	310	300	290	270	290	260	300	330	300	230	220	220	270
5	220	240	250	210	250	260	270	250	290	300	320	300	330	330	300	210	290	260	300	350	250	270	230	230	275
6	230	230	220	230	240	250	280	250	280	300	300	...c	...c	...c	...c	...c	...c	270	300	340	310	240	220	230	...
7	260	270	290	290	230	230	230	260	290	300	290	310	290	300	300	250	270	270	300	360	290	210	q220c	230	279
8	240	230	230	240	230	240	230	250	270	300	300	330	320	300	300	280	300	230	320	350	340	340	230	240	281
9	240	240	240	230	260	270	280	250	290	300	300	q310c	320	300	q290c	280	q270c	260	310	340	300	220	230	220	273
10	220	240	240	250	290	310	270	250	300	310	320	310	330	340	270	230	290	270	310	340	320	330	240	230	286
11	230	220	230	250	270	280	270	240	280	310	310	360	320	330	330	350	300	260	300	370	240	200	220	210	278
12	230	220	230	230	240	290	280	240	300	320	360	330	340	320	300	270	290	260	300	330	340	320	230	260	285
13	230	230	240	230	260	265	280	250	280	340	340	340	370	310	320	300	290	250	300	450	320	280	250	230	291
14	220	240	220	250	250	260	270	230	300	340	360	390	400	360	350	290	250	270	330	420	350	270	230	240	295
15	240	250	240	250	270	300	260	250	300	330	310	330	350	320	330	320	310	270	320	390	350	250	230	230	294
16	250	240	250	260	270	260	280	260	300	330	330	350	370	370	310	330	330	260	270	330	320	300	270	230	295
17	230	240	230	250	260	260	280	250	300	320	330	360	370	330	350	350	300	260	300	370	250	330	230	[illegible]	290
18	220	220	250	240	250	260	270	270	300	330	330	330	320	340	320	300	310	270	320	320	280	270	230	230	282
19	240	240	260	260	270	280	280	260	290	280	290	340	320	330	330	290	300	290	320	4[illegible]0	370	350	270	250	297
20	240	250	250	250	250	240	270	260	290	280	310	q310c	q310c	q300c	300	280	320	270	310	350	350	310	270	[illegible]	284
21	240	230	250	260	270	270	290	250	290	300	310	[illegible]	[illegible]	310	300	270	300	280	320	450	360	390	250	230	294
22	220	230	250	250	270	270	270	260	300	300	330	320	350	310	310	[illegible]	300	270	310	390	350	240	230	230	[illegible]
23	230	240	250	270	270	260	230	250	300	300	300	300	340	320	300	300	300	280	[illegible]	330	260	370	230	240	[illegible]
24	230	240	250	260	260	260	270	260	290	290	300	[illegible]	310	310	310	290	290	280	[illegible]	340	[illegible]	260	250	210	[illegible]
25	210	240	300	290	320	300	270	260	280	290	300	330	340	300	320	300	300	230	[illegible]	390	[illegible]	230	250	240	291
26	240	240	250	260	250	270	270	260	230	...	...	...	...	...	...	...	300	270	[illegible]	340	260	240	250	260	...
27	280	310	300	300	280	260	280	260	230	300	320	310	320	270	q280c	q290c	300	230	320	370	300	230	230	230	288
28	250	240	270	340	340	320	270	260	290	300	300	300	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	...	...	...	...	...	...	300	300	q300c	300	310	290	300	290	270	300	380	[illegible]	260	260	[illegible]	...
30	230	220	250	230	240	240	280	250	280	300	310	300	330	300	310	290	290	270	300	330	270	310	280	250	278
31																									
MEAN*	234	240	250	255	266	270	276	252	290	306	314	323	329	317	306	293	296	271	309	345	309	276	240	233	284

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 133

SEPTEMBER 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1940

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.8	5.3	5.2	5.2	5.2	5.2	4.6	4.6	4.4	...	...
2	...	...	4.8	5.2	4.9	p5.0c	p5.1c	p5.1c	5.0	4.5	4.5	...	...
3	...	...	4.8	5.1	5.2	5.0	5.1	5.2	5.1	4.8	4.7	...	...
4	...	...	4.8	5.0	5.1	5.1	5.1	5.0	4.9	4.5	4.3	...	...
5	...	...	5.0	5.2	5.1	5.0	5.2	5.2	4.9	4.4	4.5	...	...
6	...	...	4.8	5.2	5.0	...c	...c	...c	...c	...c	...c	...	...
7	...	...	4.8	5.0	4.9	5.1	4.9	5.2	4.8	4.3	4.0	...	...
8	...	...	4.8	5.0	5.1	5.1	5.1	4.9	5.0	4.5	4.5	...	...
9	...	...	4.8	5.1	5.1	p5.1c	5.1	4.9	p4.7c	4.4	p4.2c	...	...
10	...	...	5.0	5.2	5.1	5.1	5.1	5.0	4.6	4.5	4.4	...	...
11	...	...	4.8	5.0	4.9	5.1	5.0	4.9	4.9	4.7	4.4	...	...
12	...	...	4.7	5.0	5.1	5.0	5.0	5.0	4.6	4.4	4.2	...	...
13	...	...	4.5	5.1	5.0	5.0	5.0	4.9	4.8	4.4	3.7	...	...
14	...	...	4.8	5.0	4.9	5.2	5.0	5.0	4.8	4.4	3.5	...	...
15	...	...	4.8	5.1	4.9	5.0	5.0	4.8	4.8	4.8	4.7	...	...
16	...	...	4.6	5.1	4.9	5.1	5.1	5.0	4.7	4.8	4.7	...	...
17	...	...	4.8	5.1	5.0	5.1	5.1	4.9	4.9	5.1	4.6	...	...
18	...	...	4.8	5.4	5.4	5.2	5.1	5.2	4.8	4.8	4.5	...	...
19	...	...	4.8	4.8	4.9	5.2	5.1	5.0	5.0	4.5	4.4	...	...
20	...	...	4.8	4.8	5.0	p5.1c	p5.0c	p4.9c	4.8	4.4	4.8	...	...
21	...	...	4.8	5.0	5.3	5.2	5.2	5.1	5.1	4.5	4.5	...	...
22	...	...	4.8	5.0	5.2	5.1	5.3	5.1	5.2	4.6	4.4	...	...
23	...	...	4.9	5.2	5.3	5.2	5.3	5.4	5.1	4.8	4.4	...	...
24	...	...	5.0	5.0	5.2	5.2	5.1	5.1	5.0	4.7	4.4	...	...
25	...	...	4.8	4.8	5.4	5.4	5.2	5.0	5.2	4.9	4.4	...	...
26	...	...	4.6	...c	...c	...c	...c	...c	...c	...c	4.8	...	...
27	...	...	4.8	5.2	5.4	5.4	5.1	4.8	p4.8c	p4.7c	4.7	...	...
28	...	...	4.7	5.2	5.2	5.0	...	...	...	...	...	...	...
29	...	...	p5.0c	5.2	5.2	p5.3c	5.4	5.4	5.0	5.1	4.7	...	...
30	...	...	4.5	5.0	5.3	5.1	5.2	4.9	5.1	4.8	4.4	...	...
31													
* MEAN	...	...	4.8	5.1	5.1	5.1	5.1	5.0	4.9	4.6	4.4	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	240	230	220	230	220	220	200	220	240	...	...
2	...	...	240	230	220	p220c	p230c	p220c	220	250	270	...	...
3	...	...	250	230	210	220	210	210	220	220	210	...	...
4	...	...	240	230	210	220	210	210	210	220	250	...	...
5	...	...	240	230	220	220	220	210	210	200	200	...	...
6	...	...	240	230	230	...c	...c	...c	...c	...c	...c	...	...
7	...	...	240	220	220	220	210	220	220	210	240	...	...
8	...	...	240	230	230	220	210	210	210	210	240	...	...
9	...	...	240	240	230	p220c	220	210	200	210	p240c	...	...
10	...	...	230	230	230	210	220	210	210	210	200	...	...
11	...	...	240	230	220	230	210	200	200	210	230	...	...
12	...	...	230	230	230	220	210	210	210	210	230	...	...
13	...	...	240	230	220	220	230	210	220	210	200	...	...
14	...	...	220	220	210	210	220	220	210	200	210	...	...
15	...	...	230	230	220	220	220	210	220	220	250	...	...
16	...	...	240	230	220	220	230	220	230	230	230	...	...
17	...	...	250	240	230	230	230	220	220	220	250	...	...
18	...	...	250	250	230	230	230	220	220	230	230	...	...
19	...	...	240	230	220	230	240	220	240	220	230	...	...
20	...	...	240	240	220	p230c	p240c	p230c	230	230	250	...	...
21	...	...	250	240	230	230	230	230	230	230	230	...	...
22	...	...	250	230	230	220	220	230	210	240	230	...	...
23	...	...	250	240	240	230	230	230	220	220	220	...	...
24	...	...	240	240	240	240	220	220	220	250	260	...	...
25	...	...	250	240	240	230	220	210	230	230	220	...	...
26	...	...	260	...c	...c	...c	...c	...c	...c	...c	250	...	...
27	...	...	250	240	240	220	230	220	p230c	p240c	250	...	...
28	...	...	240	230	220	210	...	...	...	...	...	...	...
29	...	...	p250	240	230	p230c	230	220	220	220	230	...	...
30	...	...	230	240	230	220	220	210	210	230	240	...	...
31													
* MEAN	...	...	242	233	226	223	223	217	218	222	233	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 134

SEPTEMBER 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1940

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	1.0	1.9	2.4	2.4	2.4	2.4	2.2	2.2	1.4	1.0	0.8	0.8
2	0.8	0.9	1.1	2.1	2.3	p2.4d	p2.4d	p2.4d	2.5	2.0	0.8	0.8	p0.7d
3	0.8	0.8	1.1	1.8	2.0	2.0	2.2	2.0	1.8	1.9	1.0	0.8	0.7
4	0.8	0.9	1.1	1.2	1.8	2.0	2.4	2.2	2.0	1.8	1.1	1.0	0.6
5	0.6	0.8	1.0	1.2	2.0	2.1	2.0	1.8	1.8	1.8	1.6	1.0	0.7
6	0.7	0.9	1.0	1.2	2.2	...d	...d	...d	...d	...d	...d	0.8	0.7
7	0.6	1.0	1.2	2.0	1.9	2.0	1.8	2.1	1.9	1.7	1.1	1.0	0.6
8	0.6	0.9	1.0	2.2	2.1	1.8	1.8	2.1	1.8	1.7	1.1	0.6	0.9
9	0.7	1.0	2.1	1.2	2.4	p2.3d	2.3	1.8	1.8	1.9	p1.2d	1.2	0.8
10	0.7	1.0	1.2	2.2	1.9	2.2	2.2	1.8	1.8	1.8	1.2	1.0	0.7
11	0.7	0.8	1.0	2.2	2.3	2.3	2.3	2.2	2.2	1.2	1.1	0.9	0.7
12	0.7	0.9	1.0	1.2	1.8	1.8	1.8	1.8	1.8	1.3	1.0	0.8	0.6
13	0.7	1.0	1.6	1.7	1.8	1.9	1.9	1.8	1.8	1.7	1.1	1.1	0.8
14	0.6	0.7	0.8	1.1	1.1	1.2	1.8	1.8	1.8	1.8	1.1	1.0	0.6
15	0.6	0.8	1.0	1.2	1.8	1.8	1.8	1.7	1.7	1.3	1.1	0.8	1.6
16	0.6	0.8	1.0	1.1	1.8	1.8	1.9	1.8	2.3	1.3	1.1	1.1	0.6
17	0.8	1.1	1.1	1.7	1.8	1.9	1.9	1.9	1.8	1.7	1.2	0.8	0.7
18	0.6	0.9	1.1	1.9	2.4	2.4	3.8	2.1	2.3	2.2	1.3	1.0	0.7
19	0.9	1.7	2.3	1.9	2.8	2.8	2.9	2.8	2.6	2.5	1.4	1.1	0.7
20	0.9	1.7	2.1	2.6	3.9	p3.2	2.6	p2.8	3.0	2.7	1.9	2.0	1.3
21	1.6	2.1	1.4	1.8	1.8	2.0	1.8	1.9	1.8	1.8	1.0	0.8	0.8
22	0.6	1.0	1.0	2.1	1.8	1.9	1.8	1.8	1.8	1.7	1.1	0.9	0.6
23	0.8	0.8	1.1	1.3	1.8	2.3	1.8	1.8	1.8	1.8	1.0	0.8	0.8
24	0.8	1.0	1.1	2.1	1.8	1.9	1.8	1.8	1.7	1.2	1.0	0.8	0.8
25	0.8	1.0	2.1	1.8	1.8	1.8	1.8	1.8	1.8	1.4	1.1	1.7	0.7
26	0.7	1.0	1.2	...	...	...	...	...	...	...	1.2	1.1	0.8
27	0.8	1.0	1.1	1.3	1.8	1.9	1.8	1.8	p1.8	p1.8	1.7	0.8	0.7
28	0.7	1.2	1.1	1.8	1.8	1.8	...	...	...	...	...	...	...
29	...	...	...	1.9	1.8	p1.8	1.9	1.9	1.7	1.8	1.1	0.8	0.7
30	0.8	1.1	1.2	1.2	1.9	1.8	1.9	1.8	1.8	1.0	1.1	0.8	0.7
31													
* MEAN	0.8	1.0	1.3	1.7	2.0	2.1	2.1	2.0	2.0	1.7	1.2	1.0	0.8

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.8	2.6	3.2	3.6	3.9	4.0	4.0	3.9	3.6	3.3	3.0	2.4	1.2
2	1.8	2.6	3.2	3.6	3.9	p3.8d	p3.7d	p3.6c	3.5	3.0	2.8	1.4	p1.0d
3	1.8	2.6	2.7	3.6	3.8	4.0	4.1	4.0	3.8	3.6	3.0	2.4	1.2
4	1.6	2.7	3.2	3.6	3.8	3.9	4.3	4.0	3.6	3.6	3.1	2.4	1.2
5	1.7	2.6	3.5	3.6	3.8	4.0	4.0	3.9	3.9	3.3	3.0	2.6	1.2
6	1.8	2.8	3.2	3.5	3.9	...	...	...	...	...	...	2.4	1.2
7	1.8	2.6	3.2	3.8	3.8	4.0	4.0	3.9	3.8	3.3	3.0	2.4	1.1
8	1.6	2.6	3.0	3.6	3.8	4.0	4.0	4.0	3.8	3.3	3.2	2.4	2.0
9	1.7	2.6	3.2	3.7	3.8	p3.9d	4.0	3.9	3.7	3.4	p2.9c	2.3	1.2
10	1.8	2.8	3.0	3.6	3.7	4.1	4.1	3.8	3.8	3.3	2.9	2.3	1.3
11	1.7	2.6	3.2	3.5	3.8	4.1	4.3	3.9	3.6	3.3	2.3	2.3	1.1
12	1.7	2.6	2.9	3.6	3.8	4.0	4.0	3.9	3.8	3.3	2.8	2.3	1.1
13	1.7	2.6	3.1	3.6	3.8	3.9	4.0	3.8	3.7	2.8	2.8	2.7	1.6
14	1.7	2.3	3.0	3.5	3.7	3.9	3.9	3.8	3.8	3.2	3.0	2.2	1.1
15	1.8	2.5	3.0	3.4	3.8	4.0	3.9	3.8	3.8	2.8	2.8	2.3	1.6
16	1.7	2.6	3.0	3.5	3.8	4.0	4.0	3.9	3.8	3.2	2.8	2.3	1.0
17	1.8	2.6	3.2	3.6	3.8	4.0	4.0	4.0	3.8	3.5	2.8	2.2	1.4
18	1.9	2.8	3.3	3.8	4.0	4.1	4.3	4.1	4.0	3.5	3.0	2.5	1.2
19	1.8	2.7	3.1	3.8	4.2	4.6	4.3	4.3	4.1	3.5	3.0	2.5	1.4
20	2.0	2.9	3.4	4.1	4.1	p4.2d	p4.2d	p4.2d	4.3	3.5	2.9	2.4	1.3
21	2.0	2.8	3.3	3.6	3.9	4.1	4.0	4.0	3.8	3.4	3.0	2.4	1.4
22	2.0	2.8	3.3	3.6	3.9	4.1	4.0	4.0	3.8	3.4	3.0	2.4	1.2
23	1.9	2.8	3.3	3.6	3.9	4.1	4.1	4.0	3.8	3.4	2.9	2.4	1.2
24	1.9	2.8	3.2	3.8	3.8	4.0	4.2	4.0	3.8	3.4	2.8	2.3	1.2
25	2.0	2.8	3.2	3.6	3.9	4.0	4.0	4.0	3.7	3.3	2.7	2.4	1.0
26	1.9	2.6	3.1	...	...	...	...	...	...	...	2.8	2.3	1.1
27	1.9	2.7	3.2	3.7	3.9	4.0	4.1	4.0	p3.8d	p3.6c	3.4	2.2	1.2
28	1.9	2.7	3.1	4.0	4.0	3.8	...	...	...	...	...	...	...
29	...	...	...	3.9	4.0	p4.1	4.2	4.2	4.1	3.8	2.9	2.4	1.2
30	1.8	2.7	2.8	3.8	3.9	4.1	4.0	4.1	3.9	3.7	3.0	2.3	1.4
31													
* MEAN	1.8	2.7	3.2	3.7	3.9	4.0	4.1	4.0	3.8	3.4	2.9	2.3	1.3

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 135

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1940 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — OCTOBER 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...	8.2	7.1	6.4	5.8	5.5	6.5	9.0	10.8	11.9	12.0	11.2	10.2	10.0	10.2	10.4	11.4	12.0	11.6	11.4	11.4	10.7	11.5	12.2	9.5
2	11.3	9.8	8.8	8.1	7.2	5.8	7.0	10.0	12.0	11.9	9.6	9.1	8.8	9.3	10.3	10.8	11.1	11.2	11.4	10.5	10.0	9.4	...c	...c	...
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.1	8.9	9.0	9.3	10.0	9.8	11.3	11.0	10.3	p10.7f	11.1	11.3	p11.4f	...
4	11.5	10.1	9.8	10.0	9.5	9.2	10.6	11.8	p11.0	10.4	9.7	9.0	8.9	9.0	9.0	9.6	10.0	10.4	10.2	9.2	8.6	9.8	10.0	9.2	9.8
5	9.5	8.4	7.0	6.2	5.6	5.2	7.2	9.9	11.3	12.2	11.5	10.1	9.8	9.6	9.7	10.2	10.5	11.3	11.5	10.6	p10.6f	p10.7f	10.8	p10.2f	9.6
6	9.7	7.6	6.3	5.4	4.4	4.0	7.2	9.6	11.2	12.6	p11.9	p11.1	10.4	10.3	10.7	10.8	11.0	10.6	10.6	9.6	p9.1f	8.6	8.8	8.3	9.2
7	8.2	6.2	5.6	6.1	5.8	5.5	8.5	11.6	12.3	12.9	p13.4	13.9	13.5	12.6	12.8	11.9	11.4	10.6	12.0	11.5	11.3	11.5	10.5	11.0	10.4
8	11.8	11.3	9.4	9.2	p8.4f	p7.7f	7.0	10.4	12.7	13.2	13.3	11.6	11.5	11.4	11.5	11.7	11.9	12.0	11.5	9.8	9.2	10.8	11.6	12.9	10.9
9	12.2	9.6	8.2	8.2	7.5	5.5	8.0	10.7	12.5	13.5	13.0	10.7	10.5	10.7	11.0	10.9	10.8	10.6	10.4	9.3	8.6	9.6	9.7	p10.0f	10.1
10	10.2	8.8	...c	...c	...c	...c	...c	...c	...c	...c	11.9	10.7	10.1	10.2	10.8	11.2	11.6	11.8	12.3	12.1	11.6	12.5	12.5	11.8	...
11	12.1	10.4	8.8	7.4	5.8	4.8	7.5	10.5	12.4	13.1	12.7	11.1	10.7	10.6	10.6	10.4	10.2	9.8	9.6	9.5	8.9	8.4	8.9	p9.0f	9.7
12	p9.1f	9.2	8.4	8.0	7.3	6.2	7.8	10.7	12.3	12.9	12.0	10.7	10.2	10.9	11.5	11.9	11.9	11.8	11.8	11.8	11.2	11.4	11.9	11.6	10.5
13	11.2	10.2	7.8	5.2	4.3	2.8	6.9	9.8	11.4	11.8	10.8	10.6	11.0	11.2	11.4	11.8	11.8	11.4	11.1	10.0	...f	...f	...f	...f	...
14	...f	7.8	6.6	5.6	4.5	p5.9c	7.4	10.3	p11.0	p11.6	12.2	10.8	10.8	10.8	10.2	10.4	10.6	10.7	10.8	9.7	...f	...f	...f	...f	...
15	...f	...f	...f	7.1	7.6	5.8	7.8	10.5	12.7	13.2	12.7	11.0	11.4	11.5	11.6	11.8	12.0	12.0	11.7	11.1	10.4	9.7	9.9	p9.6f	...
16	p9.2f	8.9	6.9	5.6	4.4	3.8	7.4	10.2	11.9	12.6	12.6	11.4	11.1	11.6	12.0	12.1	12.8	12.8	12.7	11.0	9.1	8.6	...f	...f	...
17	...f	8.3	8.2	7.4	6.3	5.8	8.5	10.9	12.2	12.6	10.6	10.3	10.4	10.9	11.6	12.0	12.5	12.8	13.0	12.2	11.2	p11.5f	p11.8f	12.1	...
18	10.8	7.0	2.8	2.4	p2.6f	2.8	7.1	10.4	12.5	13.0	12.9	11.5	11.2	11.0	11.3	11.8	11.9	12.3	12.4	11.8	11.2	...f	...f	...f	...
19	...f	9.2	8.0	5.7	4.1	3.6	7.8	10.6	12.4	13.1	p12.6c	p12.1c	11.6	11.5	11.8	12.6	13.2	13.0	12.6	11.4	10.0	9.2	...f	...f	...
20	...f	...f	6.9	6.3	6.2	5.4	8.4	10.8	12.5	13.3	12.6	11.0	10.6	10.5	10.6	10.8	11.2	11.6	11.4	10.2	10.2	10.6	9.5	9.7	...
21	9.7	8.6	6.4	5.8	5.4	5.2	8.0	10.6	12.0	13.3	12.1	9.9	9.8	10.4	11.2	11.9	12.4	12.8	12.6	13.3	13.0	12.3	11.5	11.3	...
22	10.3	5.6	3.2	3.2	p4.5f	p5.8f	7.0	10.0	12.2	13.5	13.7	12.6	10.8	10.5	10.6	10.7	11.1	11.8	11.8	11.6	p11.1f	10.5	...f	...f	...
23	...	7.8	6.6	5.4	3.8	5.2	7.2	10.1	11.8	12.3	11.2	10.0	10.0	10.1	10.2	10.4	11.2	11.0	10.9	...f	...f	...f	...f	...f	...
24	...f	6.8	5.7	4.6	3.8	3.6	7.4	9.4	10.5	11.9	13.2	12.6	10.6	10.2	10.2	10.2	10.0	9.7	9.5	9.1	...f	...f	...f	...f	...
25	...f	...f	...f	5.8	4.2	3.5	7.0	9.8	10.8	12.3	12.9	13.3	13.3	13.8	13.1	12.4	10.6	9.8	10.6	10.8	10.4	10.6	11.0	10.4	...
26	11.4	9.6	7.5	6.0	5.3	4.8	8.0	10.7	12.1	12.8	13.4	14.7	14.5	14.1	14.3	14.0	13.8	13.4	13.4	14.1	14.1	14.1	13.6	13.1	11.8
27	11.0	9.6	8.8	7.5	5.5	5.0	7.4	9.6	11.5	12.4	12.9	12.9	13.5	13.9	14.3	14.1	13.4	11.8	10.8	11.2	10.5	9.6	8.5	p8.1f	10.6
28	p7.7f	7.4	7.6	7.2	5.3	4.6	8.0	10.5	12.0	12.9	13.1	12.2	12.6	12.7	13.0	13.5	13.0	12.5	10.7	10.3	10.1	...f	...f	...f	...
29	...f	...f	...f	7.8	p6.3f	4.8	7.8	10.8	11.9	11.0	10.8	11.3	11.6	12.1	13.2	13.6	13.5	13.4	13.2	12.7	...f	...f	...f	...f	...
30	...f	...f	...f	6.2	5.8	5.6	8.2	10.2	10.6	10.4	10.2	10.4	10.8	11.6	11.9	12.3	12.8	13.2	13.7	12.8	11.6	10.4	p10.0f	p9.6f	...
31	9.2	8.1	6.3	4.2	2.8	3.2	7.2	9.9	11.0	11.1	9.5	9.6	10.0	10.9	11.8	12.5	12.8	13.0	13.0	12.2	10.6	...f	...f	...f	...
* MEAN	10.3	8.6	7.2	6.4	5.5	5.1	7.6	10.3	11.8	12.4	12.0	11.2	10.9	11.0	11.3	11.6	11.7	11.7	11.6	11.0	10.6	10.5	10.7	10.6	10.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 136

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1940 OCTOBER 1940

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	240	230	260	260	240	270	250	280	270	300	300	320	320	300	300	290	280	280	310	340	260	260	220	300	278
2	300	270	260	260	250	250	280	240	280	290	300	330	320	290	330	300	290	280	280	320	330	300	q270c	q250c	265
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	320	310	300	310	300	300	280	300	380	360	260	280	280	...
4	260	280	290	300	290	230	260	250	300	320	310	320	320	300	340	320	300	280	310	360	400	250	240	230	294
5	230	240	230	240	250	250	260	250	290	310	310	340	340	300	280	310	290	270	300	380	370	250	250	220	282
6	220	220	240	250	260	260	260	250	280	300	300	340	330	320	300	290	300	280	310	440	400	300	250	240	289
7	240	240	240	270	260	330	270	260	290	290	300	310	300	300	290	290	320	290	300	360	320	280	280	280	288
8	250	290	320	370	390	400	280	260	280	300	300	300	300	q300b	310	300	300	290	320	410	370	260	260	250	309
9	250	250	260	260	240	240	270	250	280	280	300	310	320	310	310	300	290	280	310	420	380	270	240	250	286
10	220	230	...f	...f	...f	...f	...f	...f	...f	...f	300	300	300	310	320	300	270	260	290	370	300	300	260	260	...
11	230	230	230	240	240	240	260	250	280	280	300	310	300	310	320	300	290	270	300	380	410	370	280	270	287
12	250	240	240	240	250	230	260	260	280	280	320	330	330	320	310	300	290	260	300	370	320	260	230	270	281
13	260	230	220	240	240	260	260	260	280	280	300	300	300	300	310	300	290	270	300	360	380	...	...	...	...
14	q230c	230	260	250	240	q260c	270	250	q270b	q290b	300	300	310	310	330	270	290	280	310	410	350	220	250	270	272
15	240	240	270	240	240	240	270	360	290	310	310	320	330	330	300	290	290	280	300	400	390	310	300	240	295
16	240	230	250	260	260	290	270	250	290	310	300	320	310	320	330	320	320	280	330	410	400	370	320	310	304
17	290	260	230	240	250	240	260	260	290	310	320	320	320	320	300	300	290	280	300	380	360	300	290	250	290
18	230	220	240	310	370	380	270	260	280	290	300	300	310	310	310	300	310	280	300	370	400	400	320	260	305
19	230	260	250	230	240	300	270	260	300	q300c	q310c	q310c	310	320	320	300	320	280	310	390	370	330	360	260	297
20	240	250	260	260	260	260	280	260	290	300	310	310	310	320	330	310	320	280	320	360	280	280	300	270	290
21	240	220	240	260	290	240	270	260	300	320	310	320	340	330	310	310	320	270	270	260	230	220	250	240	276
22	220	230	270	320	280	320	270	240	300	300	300	320	330	330	300	300	290	270	290	370	380	260	330	290	296
23	240	240	230	240	250	270	260	250	300	310	310	320	330	320	310	350	300	270	300	330	270	300	250	250	283
24	240	210	200	250	220	270	260	250	300	320	320	320	350	330	320	290	290	270	300	300	300	270	270	240	279
25	240	230	240	240	270	280	260	240	300	310	320	330	320	340	310	330	330	260	250	240	270	240	240	230	276
26	220	230	270	270	280	300	270	250	290	310	300	330	310	290	330	310	310	280	290	280	280	270	280	260	284
27	320	320	260	230	260	300	220	260	300	310	310	320	310	310	310	320	310	260	290	320	340	330	340	340	300
28	230	220	240	230	250	270	260	260	290	300	310	310	320	300	300	300	290	280	290	400	360	370	330	300	292
29	280	250	260	250	270	250	270	240	300	300	300	300	300	300	320	300	300	270	290	360	360	360	380	380	300
30	320	300	280	250	260	260	260	250	300	320	320	310	320	310	300	320	290	260	280	330	340	340	350	350	301
31	300	240	240	240	260	260	260	250	300	320	320	340	300	310	300	300	300	280	290	370	390	410	380	340	304
MEAN*	251	244	251	259	264	274	264	257	290	302	307	317	317	312	312	304	299	275	298	360	344	298	287	273	290

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 137

OCTOBER 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1940

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.8	5.2	5.1	5.3	5.4	5.1	5.0	4.8	4.5	...	...
2	...	...	4.7	5.0	5.1	5.1	5.0	4.8	5.3	4.8	4.5	...	...
3	...	...	...c	...c	...c	5.1	5.0	4.8	5.1	5.0	4.4	...	...
4	...	...	5.0	5.3	5.3	5.0	5.0	4.8	5.3	5.0	4.5	...	...
5	...	...	4.8	5.3	5.3	5.2	5.1	5.0	4.8	5.0	4.2	...	...
6	...	...	4.8	5.2	5.2	5.1	5.1	5.2	4.9	4.5	4.3	...	...
7	...	...	5.2	5.0	5.2	5.2	5.3	4.9	4.8	4.7	4.8	...	...
8	...	...	4.8	5.3	5.3	5.4	5.3	p5.2b	5.2	5.0	4.8	...	...
9	...	...	4.8	4.9	5.3	5.4	5.2	5.3	5.2	4.8	4.4	...	...
10	...	...	p4.8c	p5.0c	5.3	5.3	5.0	5.0	5.2	4.9	4.5	...	...
11	...	...	4.8	4.9	5.4	5.4	5.2	5.2	5.2	5.0	4.3	...	...
12	...	...	4.8	5.0	5.4	5.5	5.2	5.2	5.1	4.8	4.8	...	...
13	...	...	4.8	4.8	5.2	5.3	5.3	4.8	5.2	4.8	4.5	...	...
14	...	...	p4.8	p5.0	5.2	5.4	5.2	5.1	5.0	4.4	4.3	...	...
15	...	...	4.8	5.3	5.4	5.2	5.2	5.1	4.9	4.8	4.5	...	...
16	...	...	5.0	5.2	5.2	5.4	5.1	5.1	4.9	5.1	4.7	...	...
17	...	...	4.8	5.4	5.0	5.3	5.4	5.2	4.8	4.8	4.4	...	...
18	...	...	4.8	5.0	5.3	5.1	5.1	5.0	4.9	4.8	4.8	...	...
19	...	...	4.8	p4.9	p5.0	p5.0	5.0	5.0	4.9	4.8	4.8	...	...
20	...	...	4.8	5.2	5.0	5.4	5.5	5.0	5.0	4.8	4.5	...	...
21	...	...	5.0	5.4	5.3	5.0	5.1	5.4	4.9	4.8	4.7	...	...
22	...	...	5.2	4.9	5.1	5.2	5.1	5.0	4.9	4.4	4.3	...	...
23	...	...	4.8	5.3	5.3	5.1	5.1	4.9	4.8	4.8	4.5	...	...
24	...	...	4.9	5.3	5.0	5.0	5.0	4.9	4.7	4.1	4.2	...	...
25	...	...	4.8	5.3	5.3	5 0	5.0	4.9	4.8	4.8	4.4	...	...
26	...	...	5.3	4.9	5.4	5.3	5.3	4.7	5.2	5.0	4.8	...	...
27	...	...	5.1	5.4	5.3	5.3	5.4	5.0	5.0	5.1	4.7	...	...
28	...	...	4.8	5.0	5.3	5.3	5.3	5.4	4.8	5.0	4.8	...	...
29	...	...	4.8	5.0	5.2	5.2	5.4	4.9	5.2	5.3	5.1	...	...
30	...	...	5.1	5.3	5.3	5.3	5.4	5.1	4.9	5.0	4.8	...	...
31	...	...	5.4	5.3	5.3	5.1	5.0	5.1	4.8	4.8	4.7	...	...
* MEAN	...	...	4.9	5.1	5.2	5.2	5.2	5.0	5.0	4.8	4.6	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	240	240	230	230	230	230	250	230	230	...	...
2	...	...	240	220	230	230	230	220	220	230	250	...	...
3	...	...	...	...	...	240	220	210	210	230	250	...	...
4	...	...	240	230	230	220	220	210	220	230	210	...	...
5	...	...	240	230	240	230	220	220	230	230	240	...	...
6	...	...	250	230	240	240	220	210	230	230	240	...	...
7	...	...	250	p240b	230	240	240	220	240	240	270	...	...
8	...	...	240	240	240	240	230	p270b	260	240	p260b	...	...
9	...	...	250	240	230	220	230	220	230	240	250	...	...
10	...	...	p240c	p230c	220	220	220	230	230	240	260	...	...
11	...	...	230	230	220	230	230	230	230	220	220	...	...
12	...	...	250	240	230	230	240	230	230	230	240	...	...
13	...	...	240	230	210	220	220	220	210	230	240	...	...
14	...	...	p250	p240	230	230	220	220	220	210	240	...	...
15	...	...	250	230	240	240	230	220	220	220	240	...	...
16	...	...	250	240	240	230	240	230	220	220	230	...	...
17	...	...	240	230	240	240	220	220	220	210	220	...	...
18	...	...	250	230	220	220	230	220	220	220	240	...	...
19	...	...	260	260	240	230	230	220	220	220	240	...	...
20	...	...	250	240	240	230	230	230	230	230	230	...	...
21	...	...	240	240	230	220	230	220	220	220	230	...	...
22	...	...	240	230	230	220	230	220	220	220	220	...	...
23	...	...	240	230	230	230	220	220	220	220	220	...	...
24	...	...	220	240	230	230	220	210	220	220	210	...	...
25	...	...	240	240	240	230	220	220	230	240	220	...	...
26	...	...	240	230	230	230	220	p230b	240	240	270	...	...
27	...	...	260	240	240	240	240	230	230	240	220	...	...
28	...	...	240	230	230	230	220	230	210	230	240	...	...
29	...	...	240	230	220	220	210	230	220	230	230	...	...
30	...	...	240	220	240	220	220	220	220	240	250	...	...
31	...	...	240	240	230	240	220	220	210	230	260	...	...
* MEAN	...	...	243	234	232	230	226	224	225	228	238	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 138

OCTOBER 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1940

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.7	0.8	1.1	1.1	1.8	1.8	1.9	1.9	1.8	1.2	1.1	1.8	0.6
2	0.6	0.8	1.2	1.2	1.7	1.9	2.0	1.9	1.8	1.3	1.1	1.0	0.6
3	...	...	...	...	...	2.0	2.1	1.8	1.8	1.7	1.1	0.7	0.6
4	0.8	1.0	1.1	1.7	1.8	2.0	2.3	1.8	1.8	1.2	1.2	1.0	0.6
5	0.6	1.0	1.0	1.8	1.9	2.1	2.0	1.8	1.8	1.7	1.2	1.0	0.6
6	0.9	1.1	1.7	1.9	2.0	2.2	2.1	1.9	p1.9	1.9	1.1	1.0	0.6
7	0.7	1.0	1.1	2.0	1.9	1.9	2.1	1.8	1.9	1.1	1.8	1.0	0.8
8	0.7	1.0	1.1	2.1	2.0	2.0	1.9	p2.1b	2.3	1.8	2.7	1.0	0.8
9	0.9	1.0	1.2	1.8	1.9	2.0	1.9	1.9	1.7	1.9	1.9	0.8	0.5
10	...c	...c	...c	...c	1.9	2.0	2.0	1.8	1.8	1.3	1.0	0.7	0.7
11	1.0	1.6	1.2	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.2	1.0	0.9
12	1.0	1.1	1.1	1.7	2.5	2.0	1.8	1.8	1.8	1.8	1.2	1.1	0.7
13	0.6	1.1	1.3	1.8	1.9	1.8	1.9	1.9	1.8	1.2	1.1	0.8	0.6
14	0.8	1.1	p1.3	p1.8	1.8	1.8	1.8	1.8	1.9	1.4	1.1	1.0	0.7
15	0.8	1.1	1.3	1.8	1.9	1.8	1.9	1.9	1.9	1.4	1.1	1.0	0.6
16	0.9	1.1	1.4	1.8	2.0	2.0	2.0	1.9	1.7	1.8	1.1	0.9	0.8
17	0.9	1.0	1.1	2.0	2.0	2.0	2.0	2.0	1.9	1.4	1.2	1.0	0.8
18	0.8	1.2	1.8	1.9	1.9	2.1	2.0	2.0	1.9	1.8	1.2	1.1	0.8
19	0.6	1.1	1.3	2.0	p2.0c	p1.9c	1.8	1.8	1.9	1.8	1.0	0.8	0.7
20	0.8	1.1	1.2	1.9	1.9	1.9	2.0	1.8	1.8	1.4	1.1	1.0	0.7
21	0.7	1.2	1.2	1.8	1.9	1.8	1.9	1.9	1.9	1.2	1.2	1.0	0.7
22	0.8	1.1	1.3	1.8	1.9	1.8	1.8	1.9	1.4	2.0	1.1	1.0	0.8
23	0.8	1.0	1.2	1.8	1.9	1.9	2.0	1.9	1.8	1.4	1.1	1.0	0.8
24	0.7	1.1	1.8	1.7	1.9	1.9	1.9	1.9	1.8	1.3	1.1	1.0	0.8
25	0.7	0.8	1.0	1.9	1.8	1.9	1.8	1.9	1.8	1.3	1.2	1.0	0.8
26	0.8	1.1	1.1	1.3	2.0	1.9	2.0	p2.0b	1.9	1.8	1.1	1.0	0.7
27	0.8	1.0	1.0	1.7	1.9	2.0	2.0	0.8	1.9	1.4	1.1	1.0	0.7
28	1.0	1.0	1.1	1.2	1.8	1.9	1.8	2.0	1.8	1.2	1.1	1.0	0.7
29	1.0	1.2	1.2	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.3	1.0	0.8
30	0.6	1.0	1.1	1.9	2.0	1.9	2.0	2.0	2.0	2.0	1.1	0.7	0.8
31	0.8	1.0	1.0	1.7	1.9	2.1	2.2	p4.2	1.8	1.7	1.1	1.1	0.8
* MEAN	0.8	1.1	1.2	1.8	1.9	1.9	2.0	1.9	1.8	1.6	1.2	1.0	0.7

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.6	2.7	3.1	3.8	3.9	4.1	4.0	4.0	4.0	3.4	2.8	2.3	1.2
2	1.9	2.7	3.1	3.7	4.1	4.0	4.1	4.2	3.7	3.6	3.1	2.4	1.3
3	...	...	...	...	...	4.2	4.2	4.1	4.0	3.8	2.9	2.3	1.1
4	2.0	2.7	3.2	3.7	4.0	4.2	4.1	4.0	4.0	3.6	2.8	2.3	1.2
5	2.0	2.4	3.3	3.9	4.0	4.2	4.2	4.0	4.0	3.7	3.0	2.2	1.2
6	2.1	2.8	3.2	3.8	4.1	4.2	4.3	4.0	p3.8	3.6	3.0	2.4	1.2
7	2.0	2.8	3.4	4.0	4.2	4.3	4.3	4.2	4.0	3.6	3.0	2.3	1.2
8	2.0	2.8	3.4	4.0	4.2	4.3	4.2	p4.5b	4.2	3.5	4.0	2.4	1.2
9	2.0	2.8	3.8	4.0	4.2	4.4	4.3	4.2	4.0	3.7	3.0	2.4	1.1
10	...c	...c	...c	...c	4.1	4.3	4.2	3.5	2.4	3.5	3.0	2.2	1.6
11	2.0	2.8	3.5	4.0	4.0	4.2	4.2	4.2	4.0	3.7	3.0	2.4	1.2
12	2.2	2.2	3.4	3.8	4.2	4.3	4.2	4.0	3.8	3.6	3.0	2.4	1.3
13	2.1	2.8	3.3	3.8	3.9	4.2	4.0	4.1	3.9	3.8	3.0	2.2	1.2
14	2.1	3.0	p3.3	p3.6	3.9	4.2	4.2	4.1	3.9	3.5	2.9	2.3	1.2
15	2.2	2.8	3.6	3.6	4.2	3.1	4.2	4.3	4.0	3.7	2.9	2.2	1.1
16	2.1	2.8	3.5	3.9	4.2	4.2	4.1	4.1	3.9	3.7	2.9	2.3	1.1
17	2.1	2.8	3.4	3.9	4.0	4.3	4.2	4.2	3.9	3.6	3.0	2.4	1.1
18	2.2	2.9	3.5	3.8	4.2	4.3	4.2	4.2	4.1	3.7	2.9	2.4	1.3
19	2.2	2.8	3.4	3.6	4.5	p4.5c	4.5	4.2	3.7	3.5	3.9	2.4	1.3
20	2.2	2.6	3.3	3.8	4.0	4.1	4.1	4.1	4.0	3.5	2.8	2.4	1.2
21	2.2	2.8	3.3	3.9	4.0	4.0	4.3	4.0	3.8	3.5	2.4	2.4	1.2
22	2.2	2.9	3.5	3.8	4.0	4.1	4.0	4.0	3.8	3.5	2.8	2.3	1.2
23	2.2	2.8	3.3	3.7	3.9	4.0	4.0	4.0	3.8	3.1	2.8	2.3	1.2
24	2.2	2.8	3.0	3.9	3.9	4.1	4.1	4.0	4.0	3.4	2.8	2.3	1.2
25	2.2	2.8	3.3	4.0	4.0	4.0	4.0	4.1	3.9	3.2	2.8	2.3	1.2
26	2.2	2.8	3.3	3.8	4.1	4.3	4.0	p3.9b	3.8	3.3	3.8	2.1	1.1
27	2.2	2.8	3.2	3.8	4.1	4.2	4.3	2.2	3.9	3.6	2.8	2.4	1.2
28	2.1	2.1	3.3	3.8	4.0	4.1	4.0	4.0	3.9	3.3	2.8	2.3	1.1
29	2.2	2.8	3.3	4.0	4.0	4.3	4.1	4.3	4.0	3.7	2.8	2.3	1.2
30	2.2	2.8	3.3	3.8	4.0	4.1	4.2	4.0	3.9	3.5	2.9	2.4	1.8
31	2.2	2.8	3.3	3.9	4.2	4.3	4.3	4.2	3.9	3.5	2.8	2.3	1.2
* MEAN	2.1	2.8	3.3	3.8	4.1	4.2	4.2	4.0	3.9	3.5	3.0	2.3	1.2

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF_2 EQUAL TO OR LESS THAN f^oF_1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 139

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1940 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — NOVEMBER 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...f	...f	4.7	3.8	3.2	3.6	7.4	10.0	11.8	12.8	12.2	11.2	10.6	11.2	11.2	11.8	12.6	13.5	13.4	12.1	...f	...f	...f	...f	...
2	...f	...f	...f	4.7	3.9	3.8	7.9	9.9	11.0	12.4	12.5	11.3	11.0	11.8	13.0	13.9	14.2	14.4	13.6	11.6	...f	...f	...f	...f	...
3	...f	...f	...f	...f	...f	5.1	8.6	10.8	11.4	12.0	13.4	13.8	13.5	13.2	13.2	12.9	13.5	13.8	13.5	12.7	...f	...f	...f	...f	...
4	...f	...f	...f	...f	...f	...f	9.0	11.0	11.3	12.0	11.6	12.3	13.0	13.6	13.6	13.1	12.6	9.8	10.3	10.3	9.1	8.8	9.2	8.8	...
5	8.6	7.9	8.2	8.6	7.8	7.1	9.8	11.8	12.5	13.5	13.8	13.7	12.4	11.5	11.2	11.0	11.2	11.6	12.2	12.2	11.5	11.5	...f	...f	...
6	...f	...f	...f	8.3	7.6	4.8	8.0	10.6	11.8	12.8	13.0	13.4	13.0	11.8	11.0	10.2	10.3	10.8	11.0	10.5	...f	...f	...f	...f	...
7	...f	7.5	7.2	5.8	4.3	4.6	8.0	10.1	11.4	12.9	p13.1c	p13.3c	13.5	13.1	12.4	10.4	10.0	9.7	9.6	9.3	7.4	...f	...f	...f	...
8	...f	...f	6.7	7.2	6.6	6.2	8.9	11.2	12.0	13.1	12.9	13.2	13.5	13.5	p13.7c	13.8	13.5	12.9	11.2	10.2	9.0	...f	...f	...f	...
9	...f	...f	...f	7.1	4.8	4.0	8.0	10.2	11.2	10.8	p11.8c	p12.8c	p13.8c	14.8	14.8	p12.8c	10.9	p10.8c	10.6	10.2	p9.5c	8.8	8.7	7.8	...
10	7.0	p6.6c	p6.3c	p5.9c	5.5	4.8	7.8	10.0	11.3	11.9	11.8	12.6	12.5	12.2	12.2	11.8	11.0	10.8	10.0	9.2	...f	...f	...f	...f	...
11	...f	...f	6.4	3.8	3.0	3.8	7.6	10.2	11.5	11.8	11.0	10.8	10.8	11.2	11.4	11.6	11.8	11.6	11.0	10.0	p9.5f	p9.0f	p8.5f	8.0	...
12	7.7	7.2	6.2	4.8	2.8	3.4	7.2	9.6	10.8	12.1	11.6	11.2	10.6	10.6	10.6	10.8	10.5	10.9	10.8	10.6	10.9	9.2	9.3	8.7	9.1
13	...f	...f	...f	...f	...f	3.4	7.9	11.0	13.0	p13.2c	13.5	14.0	13.3	12.5	11.6	10.0	9.7	9.8	10.4	10.2	p9.8f	p9.2f	8.8	9.0	...
14	8.8	8.4	8.0	7.4	7.6	7.1	8.9	10.0	10.4	10.4	10.2	10.2	10.0	10.2	10.1	10.5	10.5	10.5	9.8	9.7	8.8	8.8	8.4	7.8	9.3
15	7.6	7.2	6.7	6.2	6.1	6.8	7.3	9.8	11.8	12.8	12.3	11.5	11.5	12.0	12.5	12.9	13.7	13.6	13.6	12.3	10.6	10.5	10.0	8.9	10.3
16	8.0	6.4	5.4	5.2	5.2	4.4	8.0	10.3	11.6	12.5	12.8	11.9	11.2	11.0	11.6	11.8	12.2	11.9	11.4	10.9	10.6	10.6	11.1	10.6	9.8
17	9.6	8.2	8.0	8.2	7.9	6.9	9.2	10.8	12.2	12.8	12.5	9.5	9.6	10.5	11.2	10.6	11.2	11.2	10.3	9.0	9.0	9.0	9.9	10.0	9.9
18	8.9	7.6	6.4	5.2	3.5	4.4	7.9	10.0	11.1	12.0	12.8	12.6	10.8	11.3	11.9	12.6	12.8	12.5	12.5	11.8	10.3	p9.4f	p8.5f	p7.6f	9.8
19	6.7	5.5	4.6	4.2	3.6	4.2	7.6	10.0	11.2	11.6	12.2	12.1	11.2	10.7	11.2	10.9	10.8	11.2	11.4	11.2	10.1	10.2	9.5	8.8	9.2
20	p8.0f	7.2	6.7	6.8	5.9	4.7	7.6	9.8	10.4	10.0	9.0	9.2	9.7	10.0	9.3	8.8	8.4	8.8	9.5	8.4	p7.6f	6.8	6.2	5.7	8.1
21	5.6	5.2	4.6	3.8	2.9	3.6	7.5	8.6	9.4	10.4	11.5	11.0	10.6	9.6	9.4	9.4	9.5	9.7	9.7	9.3	7.5	p5.8	p5.4	4.9	7.7
22	4.6	4.7	4.6	4.7	p4.4f	p4.0	7.0	9.2	10.3	10.9	11.4	10.4	9.4	9.8	10.2	10.2	10.4	11.3	11.9	10.6	9.0	...f	...f	...f	...
23	...f	5.0	4.6	2.9	2.6	3.3	7.2	9.1	10.5	11.3	11.6	11.8	11.5	11.0	11.2	11.2	11.0	11.6	11.2	10.2	p8.1	p6.7	p5.8	p4.9	...
24	4.9	4.8	4.5	4.0	3.5	3.8	7.4	9.6	10.8	11.0	11.0	9.6	9.4	9.6	9.6	9.6	9.8	10.0	10.8	11.3	10.6	9.4	8.2	7.7	8.4
25	7.2	6.3	5.7	5.1	3.2	3.2	6.8	9.2	11.0	10.6	11.0	11.6	12.2	12.8	12.3	12.1	10.9	8.3	7.8	8.4	9.0	8.8	8.5	7.8	8.7
26	7.0	5.9	5.1	p4.8f	4.6	5.0	6.6	8.9	10.3	10.5	10.8	10.8	11.5	11.8	12.4	13.1	12.6	11.8	11.4	10.1	8.6	8.1	7.9	7.7	9.1
27	p7.0f	p6.3f	5.6	5.6	4.8	4.0	7.0	9.4	10.2	11.2	11.6	12.3	12.7	13.0	13.1	13.0	12.8	12.5	11.6	11.4	9.7	9.1	p8.1	..f	...
28	...f	...f	...f	p4.9	4.8	4.9	7.7	9.8	10.9	11.6	11.8	11.8	11.4	11.8	12.4	12.8	12.6	12.5	12.7	12.3	11.0	9.0	6.4	5.0	...
29	4.8	4.2	4.3	p4.2	3.2	3.5	7.2	9.8	10.7	9.0	10.2	11.0	10.9	10.6	10.8	11.3	12.3	12.3	12.4	11.9	12.0	10.7	9.3	p8.2	9.0
30	p6.6	p5.8	4.8	p4.8	p4.4	4.2	7.7	9.8	12.0	12.0	11.5	11.8	12.5	12.6	12.9	12.6	12.6	12.6	11.7	10.9	10.4	p8.2	p5.5	p4.6	9.3
31																									
MEAN*	7.1	6.4	5.9	5.5	4.7	4.6	7.8	10.0	11.2	11.7	11.9	11.8	11.6	11.6	11.7	11.6	11.5	11.4	11.2	10.6	9.6	9.0	8.2	7.6	9.4

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 140

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1940 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS NOVEMBER 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	300	220	250	230	270	270	260	260	280	300	300	320	330	310	q310b	320	280	270	290	350	330	260	400	370	295
2	350	260	250	240	260	270	260	250	290	330	320	320	300	300	290	290	290	270	300	q350c	400	q420c	440	360	309
3	350	330	290	280	250	250	260	250	290	300	310	300	330	280	290	290	280	280	300	360	460	470	410	430	318
4	380	330	300	280	280	290	270	260	300	300	300	300	320	300	290	290	310	270	300	320	310	280	270	280	297
5	270	270	260	240	250	250	260	250	280	300	300	290	310	300	310	300	300	270	290	350	300	340	370	350	292
6	310	290	270	250	230	250	250	240	270	230	290	300	310	300	300	310	300	270	290	350	390	390	430	320	300
7	260	270	240	230	260	300	260	230	280	280	q280c	q290c	290	290	320	310	300	270	300	400	400	400	390	320	299
8	290	290	250	250	240	260	270	250	280	290	290	280	q290b	300	q310c	320	300	270	300	320	340	360	360	350	294
9	310	270	220	200	250	260	260	260	280	280	q280c	q290c	q290c	290	300	q300c	300	q290c	290	280	300	290	310	320	280
10	260	230	230	240	240	250	250	250	270	270	270	270	290	300	300	300	300	260	310	350	360	360	320	260	281
11	230	230	230	240	240	270	260	250	280	300	300	310	310	310	230	290	300	260	290	320	320	290	330	280	280
12	220	210	230	230	240	260	250	240	230	290	300	330	320	310	300	300	300	270	300	310	330	370	380	370	291
13	370	360	360	390	410	350	270	260	280	q280c	280	300	300	290	300	280	300	270	300	340	350	290	300	270	312
14	270	230	240	250	250	260	260	240	280	290	290	320	290	290	300	290	290	270	300	360	360	370	330	260	287
15	260	240	240	250	300	330	270	250	280	300	300	300	300	320	290	q290b	300	260	300	340	330	310	280	240	287
16	240	240	250	240	230	250	270	250	290	300	310	310	330	300	290	290	300	270	300	270	230	220	270	300	273
17	230	310	330	320	260	240	260	250	230	300	320	310	320	320	330	290	300	280	280	360	290	320	280	270	292
18	260	240	240	230	250	260	260	250	290	300	340	355	340	338	320	320	320	270	280	340	360	390	350	360	303
19	350	360	350	290	250	260	260	250	300	335	360	330	350	350	335	340	275	230	280	320	310	300	310	310	311
20	320	310	280	240	230	250	260	240	320	330	350	370	350	360	360	370	215	260	300	320	290	280	300	280	299
21	240	240	260	240	250	260	240	240	305	320	330	340	400	370	360	340	340	260	300	340	300	410	370	320	307
22	270	250	260	310	330	300	260	280	290	310	330	350	390	330	340	335	230	260	300	310	350	440	420	390	318
23	340	290	240	200	250	290	260	230	290	315	330	350	335	360	245	330	220	270	290	330	350	460	410	340	307
24	280	280	260	270	260	250	250	280	310	320	350	340	320	335	320	340	270	260	270	280	290	350	330	280	296
25	260	260	260	250	230	230	260	290	305	330	315	340	300	370	380	390	240	260	290	260	250	260	290	300	290
26	350	420	440	380	280	320	270	260	310	330	325	340	330	320	320	350	290	240	280	290	320	310	250	250	316
27	270	270	240	220	230	250	250	240	290	310	310	315	320	330	325	325	320	250	230	330	330	360	350	250	290
28	220	220	300	275	245	245	260	300	305	320	330	330	345	360	360	330	335	270	250	300	340	390	400	350	308
29	280	220	330	310	300	260	250	285	335	300	330	325	350	350	365	310	320	260	260	300	270	330	320	320	303
30	230	230	320	210	260	240	250	270	300	370	340	330	365	360	350	345	320	260	260	340	330	340	470	490	316
31																									
MEAN*	286	272	274	259	261	269	259	257	290	306	313	318	324	321	316	316	291	267	289	326	331	345	348	319	298

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 141

NOVEMBER 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1940

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.8	5.1	5.1	5.0	5.1	4.9	p4.9b	4.8	4.7	...	...
2	...	...	4.9	5.3	5.4	5.3	5.1	4.9	4.9	4.8	4.4	...	...
3	...	...	4.9	4.9	5.1	4.9	5.1	4.8	4.7	4.5	4.3	...	...
4	...	...	4.9	5.3	5.3	5.3	5.4	5.0	4.8	4.5	4.8	...	...
5	...	...	5.2	5.4	5.4	5.0	5.0	4.9	4.9	4.9	4.8	...	...
6	...	...	4.8	4.9	5.0	5.0	5.1	5.0	4.9	4.8	4.8	...	...
7	...	...	4.9	4.7	p4.8c	p4.9c	5.0	4.9	4.9	4.9	4.8	...	...
8	...	...	4.8	5.0	4.9	4.9	5.0	5.1	5.0	4.8	4.8	...	...
9	...	...	4.8	4.9	p4.9c	p4.9c	p4.9c	4.8	4.7	p4.8c	4.8	...	...
10	...	...	4.8	4.8	4.8	4.8	5.0	5.1	4.9	5.0	4.8	...	...
11	...	...	4.8	5.0	5.0	5.1	5.0	4.9	4.6	4.6	4.7	...	...
12	...	...	4.9	4.8	5.0	5.2	5.1	5.0	4.8	4.7	4.7	...	...
13	...	...	4.8	p4.8c	4.8	5.3	4.9	4.9	4.9	4.4	4.7	...	...
14	...	...	4.7	4.8	5.1	5.2	4.8	4.8	4.9	4.6	4.4	...	...
15	...	...	4.8	5.2	5.3	5.1	5.1	5.0	4.6	p4.7b	4.8	...	...
16	...	...	4.8	5.0	5.3	5.2	5.1	4.8	4.7	4.7	4.7	...	...
17	...	...	4.8	5.2	5.2	5.1	5.2	5.1	5.1	4.4	4.6	...	...
18	...	...	4.7	5.0	5.4	5.4	5.4	5.4	5.4	4.9	4.9	...	...
19	...	...	4.9	5.4	5.4	5.5	5.5	5.6	5.5	5.4	...	...	...
20	...	...	4.9	5.4	5.1	5.4	5.4	5.5	5.1	4.8	...	...	...
21	...	...	5.3	5.3	5.4	5.3	5.7	5.5	5.0	5.3	4.9	...	...
22	2.3	4.4	5.3	5.4	5.2	5.5	5.6	5.4	5.5	5.5	...	...	...
23	2.2	4.3	5.2	5.0	5.5	5.5	5.5	5.5	5.5	5.4	...	...	...
24	2.2	4.5	5.0	5.2	5.6	5.5	5.0	4.9	4.8	3.9	...	...	...
25	2.3	4.8	5.0	4.9	5.3	5.4	5.6	5.4	5.5	5.1	...	...	...
26	2.2	...	4.9	5.0	5.4	5.4	5.5	5.4	5.1	5.4	4.0	...	...
27	2.2	2.9	4.8	4.9	5.5	5.6	5.6	5.4	5.3	5.4	4.9	...	...
28	...	4.7	4.9	5.0	5.3	5.5	5.6	5.6	5.5	5.5	5.4	...	...
29	2.2	4.8	4.9	4.9	5.4	5.5	5.5	4.9	4.9	4.8	4.7	...	...
30	...	4.2	4.9	4.9	5.5	5.6	5.6	5.5	4.9	4.6	...	...	...
31													
MEAN*	2.2	4.3	4.9	5.0	5.2	5.2	5.2	5.1	5.0	4.9	4.7	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	240	230	230	230	220	220	230	230	260	...	...
2	...	...	240	240	240	230	220	220	250	260	260	...	...
3	...	...	240	240	230	230	220	220	220	230	260	...	...
4	...	...	240	240	240	240	260	230	250	240	250	...	...
5	...	...	240	240	230	220	230	240	220	240	240	...	...
6	...	...	240	240	230	230	230	210	220	230	250	...	...
7	...	...	240	220	p220c	p230c	240	240	240	230	230	...	...
8	...	...	250	250	240	230	p240b	p240b	p240c	240	240	...	...
9	...	...	240	260	p250	p240	p230	220	210	p240c	270	...	...
10	...	...	230	p230c	220	230	230	220	220	240	230	...	...
11	...	...	230	220	220	220	210	220	220	220	260	...	...
12	...	...	230	240	220	220	210	220	220	230	230	...	...
13	...	...	250	p240c	230	230	240	240	230	220	250	...	...
14	...	...	230	230	230	230	230	230	230	230	230	...	...
15	...	...	230	230	230	220	220	210	210	p230b	260	...	...
16	...	...	250	230	230	230	220	220	210	220	230	...	...
17	...	...	230	230	230	220	220	230	220	210	240	...	...
18	...	...	240	230	230	220	210	210	210	220	200	...	...
19	...	...	240	260	230	230	220	210	210	230	210	...	...
20	...	...	230	230	230	230	230	230	210	210	210	...	...
21	...	...	230	230	230	220	220	220	210	210	220	...	...
22	250	240	230	230	220	220	230	230	220	240	230	...	...
23	270	240	240	240	240	220	210	220	210	220	220	...	...
24	240	230	220	230	210	215	200	210	210	210	240	...	...
25	250	240	240	220	220	230	230	230	220	250	240	...	...
26	...	...	250	230	230	210	220	230	230	290	220	...	...
27	...e	...e	210	220	240	220	220	230	230	230	230	...	...
28	...	235	230	225	210	210	220	220	250	240	290	...	...
29	...	240	240	220	230	230	220	210	230	240	250	...	...
30	...	230	240	220	210	210	240	220	230	240	250	...	...
31													
MEAN*	252	238	236	233	228	225	225	223	224	232	240	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 142

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1940 NOVEMBER 1940

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	1.0	1.0	1.9	2.0	2.0	2.0	2.0	2.1	2.0	1.4	1.0	0.9
2	0.8	1.0	1.1	1.8	2.0	2.0	2.0	2.0	2.2	1.8	1.7	1.0	0.9
3	0.6	1.0	1.9	1.8	1.9	1.9	2.0	2.0	2.0	2.0	1.1	1.1	1.1
4	1.0	1.2	1.2	1.7	2.0	2.0	2.0	2.2	1.9	1.8	1.2	1.1	0.7
5	1.0	1.2	1.3	1.8	1.9	1.7	2.0	1.9	1.9	1.7	1.3	1.0	0.8
6	1.1	1.1	1.2	1.1	1.2	p1.0	1.9	1.9	1.9	1.9	1.2	0.8	1.0
7	1.1	1.2	1.7	1.8	p1.9c	p2.0c	2.0	2.0	1.9	1.4	1.2	1.0	0.8
8	1.0	1.2	1.7	2.2	2.2	2.1	2.1	p2.0b	p1.9c	1.8	1.2	1.0	0.8
9	0.8	1.2	1.2	1.7	p1.8c	p1.9c	p2.0c	2.0	1.7	2.0	1.1	p1.0c	0.8
10	0.9	1.2	1.1	1.9	1.8	2.0	1.9	2.0	2.0	1.9	1.1	1.0	0.6
11	0.8	1.0	1.1	1.3	1.8	1.8	2.1	2.1	1.9	1.9	1.2	1.2	0.7
12	0.8	1.1	1.1	1.8	1.9	1.8	1.9	2.1	1.9	1.4	1.2	0.8	0.7
13	0.8	1.1	1.2	p1.5c	1.8	2.5	1.9	1.8	1.8	1.2	1.1	0.7	0.8
14	0.9	1.1	1.1	1.3	2.0	1.9	2.0	2.0	2.0	1.1	1.2	1.0	0.6
15	0.6	1.1	1.2	1.3	1.9	2.0	2.0	2.2	2.1	p1.8b	1.4	1.0	0.8
16	0.6	1.0	0.6	1.3	1.7	1.8	1.8	1.9	1.8	1.3	1.0	0.8	0.6
17	0.8	1.0	1.2	1.8	1.9	2.1	1.9	1.9	1.7	1.7	1.3	1.0	0.6
18	0.8	1.1	1.2	1.7	1.7	1.7	1.8	1.9	1.7	1.7	1.2	0.6	0.8
19	0.7	1.0	1.2	p1.7b	p2.2b	2.7	2.2	2.1	2.0	2.0	1.7	0.9	0.8
20	0.9	1.2	1.8	1.3	1.7	1.8	1.9	1.9	1.9	1.7	1.1	1.0	0.8
21	0.8	1.0	1.1	1.2	1.4	1.7	1.7	1.7	1.7	1.1	1.0	1.0	0.8
22	1.0	1.1	1.7	1.9	1.9	1.9	1.9	2.0	1.9	1.6	1.3	1.0	0.6
23	0.8	1.0	1.0	1.3	1.3	1.9	1.9	1.8	1.7	1.2	1.0	0.8	0.7
24	0.6	0.8	1.1	1.2	1.8	1.7	1.8	1.9	1.7	1.3	1.1	1.0	0.8
25	0.8	1.0	1.1	1.2	2.0	1.9	2.1	2.0	1.3	1.2	1.0	0.9	0.7
26	0.7	1.0	1.2	1.2	1.8	2.0	2.0	1.7	1.9	1.2	1.2	1.1	0.8
27	0.6	1.0	1.1	1.1	1.2	1.7	1.8	1.7	1.7	1.1	1.1	0.8	0.7
28	0.6	0.6	1.0	1.1	1.2	1.3	1.7	1.4	1.9	1.0	1.1	1.0	0.7
29	0.6	0.8	1.0	1.1	1.1	1.9	1.9	2.0	1.9	1.8	1.1	0.6	0.8
30	0.6	1.0	1.1	1.1	1.3	1.8	1.7	1.9	1.8	1.7	1.1	1.1	1.2
31													
*MEAN	0.8	1.0	1.2	1.5	1.8	1.9	1.9	1.9	1.8	1.6	1.2	1.0	0.8

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2.2	2.8	3.2	4.0	4.1	4.2	4.3	4.2	4.1	3.5	3.0	2.4	1.9
2	2.2	2.9	3.4	4.0	4.1	4.2	4.2	4.2	4.0	4.0	3.0	2.2	1.4
3	2.4	2.9	3.6	4.0	4.0	4.3	4.2	4.1	3.9	3.6	3.2	2.4	1.2
4	2.1	2.8	3.2	4.0	4.2	4.3	4.5	4.2	4.0	3.8	2.8	2.4	1.2
5	2.3	2.8	3.7	3.8	4.1	2.2	4.3	4.2	3.9	3.8	2.9	2.4	1.7
6	2.2	2.8	3.7	3.7	4.1	4.2	4.3	4.2	4.0	3.7	2.9	2.4	1.2
7	2.3	2.8	3.7	3.9	p4.1c	p4.2c	4.4	4.2	4.0	3.5	2.8	2.3	1.2
8	2.2	3.0	3.7	4.2	4.3	4.3	p4.2b	p4.2b	p4.1c	4.0	3.0	2.4	1.2
9	2.3	3.0	3.8	4.0	p4.0c	p4.0c	p4.1c	4.1	4.1	p3.2c	2.4	p1.8c	1.2
10	2.4	2.8	3.7	4.3	4.3	4.4	4.3	4.2	4.2	4.0	2.8	2.5	0.6
11	2.3	2.8	3.2	4.0	4.1	4.3	4.4	4.3	4.1	3.7	2.9	2.4	1.4
12	2.2	3.0	3.5	3.9	4.1	4.1	4.3	4.3	4.0	3.8	3.0	2.4	1.4
13	2.3	2.9	2.6	p2.8c	4.0	4.3	4.3	4.2	3.9	3.5	3.0	2.4	1.3
14	2.2	2.9	3.5	4.0	4.2	4.1	4.3	4.1	4.0	3.7	2.9	2.4	1.4
15	2.3	3.0	3.5	4.0	4.3	4.2	4.3	4.3	4.0	p3.6b	3.1	2.5	1.4
16	2.3	2.9	3.5	3.8	4.1	4.1	4.2	4.1	3.9	3.5	2.9	2.3	1.3
17	2.8	2.9	3.3	3.9	4.0	4.1	4.1	4.2	3.8	3.5	3.0	2.6	1.8
18	2.2	2.8	3.5	3.7	4.0	4.0	4.0	4.0	3.9	3.5	2.7	2.4	1.3
19	2.2	2.8	3.4	4.2	4.3	4.2	4.3	4.1	3.9	3.6	3.0	2.3	1.3
20	2.2	2.8	3.4	3.7	4.0	4.2	4.1	4.1	3.0	3.6	2.8	2.4	1.2
21	2.2	2.8	3.1	3.7	4.0	4.0	4.0	4.0	3.7	3.5	2.8	2.4	1.4
22	2.2	2.8	3.2	3.7	4.0	4.1	4.2	4.0	4.0	3.8	2.9	2.2	1.4
23	2.1	2.8	3.0	3.8	4.0	4.0	4.0	4.0	3.8	3.2	2.8	2.3	1.4
24	2.1	1.9	3.1	3.8	4.0	4.0	4.2	4.0	4.0	3.4	3.0	2.4	1.4
25	2.2	2.7	3.4	3.8	4.1	4.0	4.2	4.0	4.0	3.7	2.9	2.4	1.4
26	2.1	2.8	3.2	3.8	4.0	4.0	4.1	4.0	4.0	4.3	2.9	2.3	1.2
27	2.2	2.9	3.2	3.9	4.2	4.2	4.1	4.1	4.0	3.5	3.0	2.4	1.7
28	0.6	2.8	3.1	3.8	4.0	4.1	4.1	4.0	4.4	3.5	4.3	2.4	1.2
29	2.2	1.8	2.8	3.7	4.0	4.1	4.0	4.1	3.9	3.7	2.9	2.4	1.6
30	2.2	2.9	3.2	3.7	4.0	4.1	4.1	4.0	4.0	3.6	3.7	1.7	2.2
31													
*MEAN	2.2	2.8	3.4	3.8	4.1	4.1	4.2	4.1	4.0	3.6	3.0	2.3	1.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 143

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1940 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — DECEMBER 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p4.2	p4.2f	p4.2f	4.1	3.8	4.5	7.9	9.5	10.6	11.2	11.7	11.7	11.0	11.6	12.0	12.1	12.5	12.6	12.4	11.9	10.3	p8.6f	p7.0	p5.6	9.0
2	p4.9	p4.7f	p4.6f	p4.5f	p4.4f	4.3	6.8	9.2	10.4	11.2	11.3	10.7	10.0	10.5	11.2	11.4	11.9	11.7	11.3	11.4	10.6	9.0	6.7	5.0	8.7
3	p4.5f	p4.0f	3.5	p3.8f	p4.0f	4.2	6.7	9.5	10.7	11.0	11.2	10.8	10.3	10.4	10.0	10.2	10.9	11.2	11.0	10.8	9.4	8.2	6.7	6.0	8.3
4	4.9	4.8	p4.5f	p4.2f	p3.9f	p3.5	7.0	8.7	10.3	11.0	10.2	9.5	10.0	10.5	10.8	11.0	10.8	10.8	11.0	10.5	9.7	8.3	8.6	5.7	8.3
5	p4.6	p4.2	p3.7	p3.2	2.8	2.9	6.6	9.4	10.5	10.9	11.2	9.6	9.4	9.2	9.8	p10.0c	p10.2c	10.4	10.4	10.5	9.7	8.9	7.8	6.6	8.0
6	p6.1f	p5.6f	p5.1f	p4.7	5.1	4.0	7.3	9.4	10.5	10.5	10.6	9.6	9.7	9.8	9.6	10.0	10.2	10.6	11.0	10.5	10.2	9.2	7.8	...f	...
7	...f	...f	...f	...f	4.2	4.4	7.0	9.1	10.2	10.5	10.3	9.7	9.6	10.2	10.9	10.6	10.4	10.6	10.2	9.8	9.1	7.8	6.7	...c	...
8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	11.1	11.8	12.0	12.2	12.4	12.1	10.2	9.7	9.7	10.2	10.2	9.4	8.3	7.0	...
9	6.2	5.8	p5.5f	p5.2f	5.0	4.5	7.4	10.0	11.1	12.0	12.4	12.9	12.8	12.6	11.8	10.9	10.5	10.2	10.8	11.0	10.8	9.4	7.5	...f	...
10	...f	...f	...f	...f	...f	3.2	6.8	9.4	11.0	11.5	12.1	12.1	12.8	12.6	p13.5g	14.4	13.7	12.8	12.1	11.3	10.8	9.5	8.3	8.2	...
11	...f	...f	...f	...f	...f	3.2	6.8	9.4	10.9	11.6	12.3	12.0	11.5	11.8	11.9	12.3	12.1	12.1	11.7	10.9	9.6	9.0	10.3	10.4	...
12	9.3	7.6	6.7	6.2	5.0	5.0	7.0	9.4	10.8	p11.4c	p11.9c	12.4	12.2	11.4	11.8	11.8	11.2	11.0	11.7	10.2	9.1	...f	...f	...f	...
13	...f	...f	...f	...f	...f	5.2	8.0	10.5	11.6	11.4	12.1	12.2	11.7	11.2	11.4	11.9	11.9	11.8	11.4	11.1	10.7	9.5	9.2	8.4	...
14	8.2	7.1	6.6	6.3	6.7	6.3	7.3	9.5	10.5	11.8	12.2	12.6	12.1	11.6	11.2	11.8	12.5	12.1	11.8	10.8	10.0	8.3	...f	...f	...
15	...f	...f	...f	...f	...f	...f	6.8	9.8	11.3	11.7	11.7	11.4	11.4	11.4	11.2	11.8	11.8	11.6	11.0	9.0	8.0	p8.5f	9.0	7.8	...
16	6.7	6.1	6.1	5.2	4.5	4.0	7.2	9.3	10.2	10.6	10.4	9.5	9.5	9.5	10.4	11.5	11.6	11.4	11.4	11.0	9.2	7.4	6.6	p6.2f	8.6
17	p5.8f	p5.4f	4.9	5.0	4.7	4.5	6.9	9.0	9.3	10.2	9.5	9.6	10.0	10.2	11.0	11.6	11.8	11.7	11.5	10.4	9.4	8.4	7.2	...f	...
18	...f	...f	...f	5.0	5.5	5.2	7.6	9.0	10.0	10.6	10.0	8.8	8.2	8.3	9.0	9.6	10.2	10.6	10.6	10.2	9.4	9.2	9.3	7.8	...
19	6.7	5.6	4.5	4.1	3.2	3.5	6.6	8.3	10.2	10.4	9.4	9.2	9.3	10.5	10.8	11.6	11.9	11.6	11.8	11.0	9.8	8.1	7.8	p7.3f	8.5
20	p6.7f	p6.1f	5.5	...	...	...	6.4	9.2	10.2	10.4	10.4	10.3	10.6	9.2	10.1	11.0	11.0	11.0	11.3	11.9	10.8	9.4	9.4	8.9	...
21	7.2	6.7	5.6	5.1	...f	...f	6.0	3.3	10.3	11.4	12.1	11.4	10.8	10.2	10.3	9.7	9.7	10.4	10.6	10.6	10.3	9.3	...f	...f	...
22	...f	...f	...f	...f	...f	3.4	7.0	9.0	10.0	10.8	11.5	11.0	9.3	9.2	9.7	11.1	11.4	11.4	11.2	11.1	10.0	8.4	...f	...f	...
23	...f	...f	...f	...f	...f	4.4	6.8	9.0	10.2	10.3	10.6	10.3	10.5	10.3	11.1	12.3	11.8	11.4	11.2	11.3	10.4	9.4	7.7	7.4	...
24	6.4	p5.8f	p5.1f	p4.4f	3.3	3.0	5.9	8.0	10.2	...c	...c	...c	...c	...c	...c	12.8	12.5	11.9	11.2	10.7	9.1	...b	...b	...b	...
25	...b	...b	...b	2.8	p3.7f	p4.6f	5.5	7.5	8.4	9.7	10.3	11.5	11.0	11.0	11.4	11.5	11.8	10.5	10.1	10.1	9.5	...a	...a	...a	...
26	...a	...a	...a	...a	4.1	2.1	6.0	8.2	9.6	10.2	10.6	10.9	11.0	10.7	10.4	10.8	10.3	10.5	9.3	8.8	7.5	...b	...b	...b	...
27	...b	...b	...b	...b	...b	...b	5.2	7.1	7.6	8.2	9.0	10.0	10.8	11.0	11.1	11.4	11.9	11.0	10.4	9.8	9.0	7.5	...c	...c	...
28	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	11.9	11.0	11.2	10.8	10.5	10.2	9.6	8.6	7.4	...
29	7.0	6.2	...f	...f	...f	...f	5.9	8.2	9.8	10.2	10.0	10.4	8.9	9.0	10.6	11.5	11.0	10.8	10.5	10.4	9.4	8.2	7.8	7.0	...
30	6.8	4.7	p4.6f	p4.4f	4.2	3.0	6.3	9.0	9.6	10.0	9.2	8.8	8.4	9.6	11.0	13.2	12.5	11.6	10.2	9.6	8.8	7.6	8.0	8.2	8.3
31	6.4	4.6	4.4	3.6	3.7	...c	...c	...c	...c	9.7	9.0	8.4	8.0	8.4	9.7	11.1	11.7	11.0	10.9	10.4	9.4	8.0	6.8	5.8	...
*MEAN	6.3	5.5	5.0	4.6	4.3	4.0	6.7	9.0	10.2	10.7	10.8	10.7	10.4	10.5	10.9	11.4	11.4	11.2	11.0	10.6	9.7	8.7	8.0	7.2	8.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 144

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1940 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — DECEMBER 1940

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	440	430	440	340	260	250	260	270	310	340	340	370	360	370	330	325	310	270	290	330	370	410	450	440	346
2	440	460	470	430	410	290	260	280	290	300	340	335	355	350	350	330	340	260	260	330	280	360	430	420	349
3	420	430	360	270	260	270	250	300	295	315	340	340	370	360	350	340	340	260	270	350	360	380	360	350	331
4	380	390	350	280	270	280	260	240	330	320	330	360	390	380	360	340	330	250	270	290	320	350	370	470	330
5	440	420	480	510	490	300	260	270	290	330	q340c	350	360	400	380	q340c	q300c	260	270	290	350	380	400	390	358
6	370	340	330	260	230	240	250	270	300	340	350	360	365	380	360	390	350	260	280	280	320	350	380	350	321
7	330	380	370	290	260	270	260	280	310	320	330	370	370	390	380	340	350	250	250	310	340	390	430	q400c	315
8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	310	350	390	370	400	390	380	260	280	300	330	360	390	340	...
9	290	270	270	310	370	330	270	290	310	330	360	370	355	410	380	320	330	270	290	340	380	430	450	400	339
10	400	390	350	350	420	330	270	250	300	300	340	400	360	350	350	390	300	280	300	330	340	390	370	330	341
11	330	370	480	480	420	340	270	240	290	310	370	360	360	370	390	260	280	280	260	370	420	400	300	270	342
12	290	340	340	410	400	330	270	290	300	q310c	q330c	340	400	350	390	340	220	270	290	320	440	440	390	410	342
13	490	600	640	540	340	270	260	260	290	300	330	330	320	330	340	340	330	270	300	310	320	330	300	270	350
14	280	300	330	360	220	300	270	300	300	330	370	320	360	370	q370a	360	350	240	310	320	320	300	q300f	q290f	291
15	...f	...f	...f	...f	...f	q330f	270	300	310	330	340	360	380	380	360	400	350	370	300	330	300	280	240	330	...
16	310	300	300	340	260	200	270	300	330	340	390	410	400	390	400	370	370	260	300	310	300	370	410	400	335
17	400	370	300	230	230	240	260	300	320	360	350	360	390	390	380	390	340	250	280	300	320	350	340	300	323
18	320	320	340	300	290	260	260	290	300	330	370	400	400	420	400	390	350	260	270	300	310	300	290	280	323
19	290	270	270	260	260	290	260	290	300	340	380	390	380	360	350	360	340	240	260	210	310	380	380	380	315
20	390	310	300	300	390	q320f	250	260	290	340	400	390	460	400	360	370	390	270	240	280	280	320	300	300	330
21	260	300	360	470	370	310	260	240	290	310	320	350	360	390	390	300	300	250	280	300	310	400	400	430	334
22	430	530	560	550	390	250	260	240	320	290	350	380	380	350	400	340	340	350	290	300	350	400	410	410	370
23	410	390	400	350	230	260	260	290	300	330	340	355	370	400	380	360	360	260	280	270	260	330	360	320	328
24	320	330	300	290	250	270	260	300	300	...c	...c	...c	...c	...c	...c	390	330	260	280	310	390	350	390	460	...
25	460	420	430	410	360	340	290	290	300	300	350	350	370	370	340	340	345	260	280	290	320	q370a	q430a	480	354
26	470	q410a	350	q300a	250	q260a	260	250	300	330	350	370	390	380	390	380	340	290	300	340	390	430	410	470	350
27	500	510	430	380	330	300	280	240	240	390	350	370	380	380	400	390	360	280	290	300	330	370	q400c	q380c	325
28	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	335	440	270	290	300	280	320	280	270	...
29	300	300	320	330	340	340	290	300	350	350	370	460	430	400	380	350	360	330	280	290	310	320	330	350	341
30	360	320	370	280	260	280	280	290	300	340	330	380	450	400	400	320	320	310	290	290	310	400	340	290	330
31	300	320	340	290	290	...c	...c	...c	...c	390	390	380	430	400	370	340	330	270	300	290	320	340	370	360	...
MEAN*	372	376	378	354	316	288	265	276	302	329	350	368	382	379	374	353	340	273	282	306	332	365	369	367	337

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 145

DECEMBER 1940

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1940

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.7	5.1	5.4	5.5	5.5	5.4	5.3	4.8	4.3	...	...	...
2	...	4.6	4.9	5.5	5.5	5.4	5.5	5.5	5.6	4.9	4.8	...	...
3	...	4.8	5.4	5.0	5.5	5.5	5.5	5.5	5.1	5.0	4.8	...	...
4	...	...	5.0	5.2	5.3	5.5	5.6	5.6	5.5	5.1	5.2	...	...
5	...	4.5	4.6	5.0	r5.2c	5.5	5.4	5.5	5.4	...c	...c	...	...
6	...	4.8	5.0	5.5	5.5	5.4	5.3	5.4	5.5	5.5	4.9	...	...
7	...	4.3	4.8	5.4	5.3	5.5	5.4	5.5	5.2	4.9	4.9	4.5	...
8	...	...c	...c	...c	...c	5.5	5.5	5.7	5.4	5.5	5.2	...	...
9	...	4.4	5.0	5.5	5.6	5.5	5.4	5.5	5.5	5.0	4.8	...	...
10	...	...	5.0	5.2	5.6	6.0	5.6	5.5	5.5	5.6	...	...	...
11	...	...	4.9	5.5	5.5	5.5	5.6	5.6	6.0	...	...	...	...
12	...	4.4	5.0	p5.2c	p5.4c	5.5	6.8	5.5	5.5	4.8	...	...	...
13	...	...	4.8	4.9	5.4	5.3	5.2	5.1	4.8	5.2	4.9	...	...
14	...	4.9	4.9	5.5	5.5	5.3	5.2	5.3	p5.3a	5.4	5.3	...	...
15	...	5.0	5.5	4.9	5.0	5.2	5.2	5.1	5.0	5.4	5.0	5.0	...
16	...	4.8	5.0	5.0	5.4	5.5	5.5	5.5	6.0	5.5	5.4	...	...
17	...	4.7	4.9	5.5	5.5	5.5	5.5	5.5	5.6	5.5	5.4	...	...
18	...	4.4	4.9	5.0	5.5	5.5	5.4	5.5	5.5	5.4	5.0	...	...
19	...	4.8	4.9	5.0	5.5	5.5	5.4	5.5	5.4	5.0	4.9	...	...
20	...	4.8	4.8	5.4	5.5	5.4	5.4	5.2	5.4	5.5	5.4	...	...
21	...	...	5.2	5.0	5.0	5.5	5.2	5.4	5.5	4.9	5.0	...	...
22	...	...	4.9	5.0	5.0	5.2	5.3	5.2	5.5	5.2	5.2	...	...
23	...	4.5	4.9	4.9	5.0	5.3	5.3	5.5	5.4	5.5	5.0	...	...
24	...	4.8	4.9	...c	...c	...c	...c	...c	...c	5.0	4.8	...	...
25	...	...	4.8	5.0	5.3	5.4	5.5	5.5	5.3	5.0	5.0	...	...
26	...	...	4.9	5.1	5.0	5.1	5.1	5.0	4.9	5.0	4.9	...	...
27	...	...	4.9	5.3	5.2	5.1	5.2	5.4	5.5	5.2	5.2	...	...
28	...	...c	...c	...c	...c	...c	...c	...c	...c	4.9	5.0	...	...
29	...	4.3	4.8	4.9	4.9	5.0	5.1	5.2	5.0	5.2	5.3	4.9	...
30	...	4.4	4.7	4.9	4.9	5.0	5.2	5.0	5.0	5.0	4.9	4.8	...
31	...	...c	...c	5.0	5.2	5.3	5.4	5.2	5.1	5.4	5.0	...	...
* MEAN	...	4.6	4.9	5.2	5.3	5.4	5.4	5.4	5.4	5.2	5.0	4.8	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	240	210	210	220	220	220	230	230	240	...	...
2	...	230	230	230	210	220	220	210	220	240	230	...	...
3	...	240	220	230	220	220	220	220	210	220	230	...	...
4	...	...	230	215	220	210	210	220	220	230	230	...	...
5	...	230	230	230	p220c	210	210	200	210	...c	...c	...	...
6	...	240	230	230	220	210	190	210	220	220	200	...	...
7	...	240	230	230	230	220	220	220	210	220	210	260	...
8	...	...c	...c	...c	p290	240	230	210	240	230	220	...	...
9	...	240	230	210	230	230	220	220	230	230	230	...	...
10	...	...	210	220	240	200	210	220	230	240	250	...	...
11	...	...	250	230	240	230	240	230	220	230	240	...	...
12	...	260	230	p230c	p230c	230	220	220	220	230	220	...	...
13	...	...	240	250	240	240	230	220	230	230	240	...	...
14	...	240	240	240	230	230	220	210	p230a	250	250	...	...
15	...	240	240	240	230	220	230	220	220	220	240	...	...
16	...	240	240	230	220	220	220	240	220	230	260	...	...
17	...	240	240	230	220	200	240	220	240	250	260	...	...
18	...	240	230	240	230	220	210	200	210	220	220	...	...
19	...	230	230	230	220	230	210	230	220	230	240	...	...
20	...	230	240	250	250	240	220	250	220	260	230	...	...
21	...	...	240	230	220	220	220	220	220	210	200	...	...
22	...	...	230	240	220	220	220	220	220	240	240	...	...
23	...	260	230	230	220	230	230	210	220	200	280	...	...
24	...	250	240	...c	...c	...c	...c	...c	...c	230	210	...	...
25	...	...	230	260	230	200	260	250	260	250	220	...	...
26	...	...	240	230	230	250	280	220	220	220	250	...	...
27	...	...	230	220	240	240	210	240	230	240	240	...	...
28	...	...c	...c	...c	...c	...c	...c	...c	...c	200	210	...	...
29	...	250	240	230	230	230	230	210	240	240	220	260	...
30	...	240	230	220	200	210	220	210	230	230	220	250	...
31	...	...c	...c	240	230	210	220	230	210	270	220	...	...
* MEAN	...	240	234	231	228	223	224	221	224	231	232	257	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 146

DECEMBER 1940 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — DECEMBER 1940

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	1.1	1.0	1.0	1.7	1.8	1.8	1.8	1.8	1.3	1.1	1.0	0.9	2.2	2.8	3.2	3.1	4.0	4.1	4.1	4.1	4.0	3.7	3.0	2.5	1.6
2	0.8	0.8	1.0	1.3	1.7	1.8	1.9	1.7	1.9	1.8	1.2	1.0	0.9	2.2	1.9	3.1	3.7	4.0	4.0	4.1	3.9	4.1	3.8	3.0	2.4	1.8
3	0.6	1.1	1.0	1.2	1.7	1.8	1.9	1.9	1.9	1.8	1.8	1.1	0.7	2.3	2.8	3.4	3.6	3.9	4.0	4.3	4.0	3.9	3.5	2.8	2.4	2.0
4	0.8	1.0	1.1	1.2	1.6	1.7	1.9	1.8	1.8	1.2	1.2	1.1	0.6	2.1	2.8	3.1	3.7	4.0	4.0	4.2	4.0	3.8	3.0	2.8	2.4	1.3
5	0.8	1.1	1.1	1.2	p1.4c	1.8	1.8	1.9	1.8	p1.5c	p1.2c	0.8	0.8	2.1	2.8	3.4	3.7	p3.8c	4.0	4.2	4.2	3.8	p3.4c	p3.0c	2.5	1.6
6	0.9	1.1	1.2	1.1	1.2	1.8	1.9	1.7	1.2	1.2	1.0	0.8	0.8	2.3	2.8	3.5	3.8	4.0	4.0	4.2	4.0	3.9	3.6	3.9	2.4	1.6
7	0.7	0.8	1.1	1.1	1.8	1.8	1.9	1.9	1.2	1.1	1.1	1.0	0.7	2.2	2.0	3.7	3.8	4.0	4.3	4.1	4.3	4.0	3.9	3.0	1.7	1.5
8	...c	...c	...c	...c	1.8	2.0	2.0	1.9	1.9	1.9	1.2	0.6	0.7	...c	...c	...c	...c	p4.5	4.5	4.3	4.3	4.0	3.8	3.1	2.5	1.7
9	0.8	1.0	1.1	1.2	1.3	1.9	1.9	1.9	1.9	1.1	1.1	0.9	0.7	2.2	2.1	3.4	4.0	4.0	4.3	4.3	4.3	4.0	3.8	3.0	2.7	2.2
10	0.6	0.9	1.1	1.3	1.8	2.0	p2.0b	2.1	1.9	1.8	1.1	0.9	0.5	2.2	2.2	2.0	2.2	4.1	4.3	4.3	4.4	4.1	3.8	3.1	2.6	1.7
11	0.7	1.1	1.0	1.7	1.8	1.9	2.0	2.1	2.0	1.9	1.1	0.8	0.7	2.2	2.8	3.4	4.0	4.2	4.2	4.4	4.3	4.2	4.0	2.6	2.7	1.3
12	0.8	0.9	1.2	p1.5c	p1.8c	2.0	p4.0b	2.1	1.8	1.1	1.0	1.0	0.8	2.2	2.7	3.5	p3.8c	p4.0c	4.3	4.4	4.3	4.2	4.0	3.1	2.6	1.8
13	0.8	1.1	1.2	1.8	1.8	2.0	2.2	2.0	1.9	1.0	1.0	1.0	1.1	2.2	2.8	3.9	4.0	4.1	4.2	4.5	4.3	4.2	4.0	3.1	2.6	1.7
14	0.6	1.0	0.9	1.8	1.9	1.9	1.9	2.0	1.9	1.8	1.2	1.0	0.8	2.2	2.8	3.6	4.2	4.2	4.3	4.4	4.2	5.1	4.0	2.8	1.9	2.0
15	0.8	1.2	1.2	1.7	1.8	2.0	2.1	2.4	1.8	1.9	1.0	0.8	0.6	2.2	2.1	3.7	4.0	4.3	4.3	4.3	4.4	4.0	3.8	2.8	2.5	1.6
16	0.6	1.0	1.1	1.8	1.9	2.3	2.0	2.0	1.9	1.9	2.8	1.0	0.8	2.2	2.8	3.4	3.8	4.0	4.3	4.2	4.3	4.0	4.0	4.0	2.6	1.7
17	0.7	1.0	1.1	1.2	1.9	2.0	2.0	2.0	1.7	1.8	1.0	1.1	0.8	2.2	3.0	3.4	4.0	4.2	4.4	4.3	4.2	3.8	4.0	4.0	2.1	1.7
18	0.8	1.0	1.1	1.2	1.2	1.8	1.8	2.0	1.8	1.2	1.1	1.0	0.7	2.1	2.0	3.3	3.8	4.0	4.2	4.2	4.1	4.0	3.8	3.0	2.6	1.6
19	0.8	1.1	1.2	1.3	1.9	2.0	1.8	1.9	1.9	1.1	1.1	0.8	0.8	2.1	2.8	3.2	4.1	4.1	4.3	4.3	4.3	4.1	4.0	3.1	2.0	1.7
20	0.6	0.9	1.0	1.2	0.9	2.0	1.9	2.0	1.9	1.7	1.0	0.8	0.8	2.1	2.7	2.0	4.2	4.2	4.1	3.9	4.0	4.0	4.0	3.0	2.4	1.8
21	0.6	0.7	1.0	1.0	1.2	1.4	1.9	1.8	1.2	1.1	1.0	0.8	0.9	2.2	2.6	3.1	4.0	4.0	4.0	4.0	4.0	4.0	3.3	3.1	2.6	1.8
22	0.6	0.7	1.0	1.0	1.2	1.8	1.9	1.9	1.1	1.0	1.0	0.8	0.8	2.0	2.6	3.1	3.8	3.8	4.0	4.0	4.0	3.8	3.5	3.0	1.0	1.9
23	0.7	0.7	1.1	1.2	1.8	1.8	1.9	1.8	1.4	1.1	1.0	0.9	0.8	2.0	2.6	3.0	3.6	3.9	4.0	4.0	4.0	3.8	3.4	2.9	2.5	1.7
24	0.8	1.0	1.1	...c	...c	...c	...c	...c	...c	1.0	1.1	1.0	0.8	2.1	2.8	3.0	...c	...c	...c	...c	...c	...c	3.7	2.8	2.4	1.6
25	0.6	0.6	1.1	1.1	1.2	1.8	1.7	1.2	1.2	1.1	0.8	0.8	0.8	2.0	2.7	3.0	4.0	3.8	4.0	4.4	4.0	4.0	3.6	3.0	2.5	1.6
26	0.6	1.0	1.1	1.2	1.8	1.9	1.8	1.9	1.8	1.2	1.0	0.9	0.6	2.0	2.7	3.0	3.8	3.8	4.1	4.5	4.1	4.0	3.6	3.3	1.9	1.7
27	0.6	0.8	1.0	1.1	1.8	1.7	1.9	2.0	2.0	1.1	1.2	1.0	0.8	2.0	2.8	3.0	3.5	4.0	4.0	3.9	3.8	4.0	3.5	3.1	2.2	1.6
28	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.2	1.1	1.0	0.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	3.8	3.0	2.6	1.6
29	0.7	1.0	1.1	1.8	1.7	1.9	1.9	1.8	1.9	1.7	0.9	0.6	0.6	2.0	2.5	2.8	3.7	4.0	4.0	4.0	4.0	4.0	3.7	3.1	2.6	1.8
30	0.6	0.8	1.0	1.1	1.2	1.2	1.8	1.8	1.8	1.8	1.8	0.8	1.0	1.9	2.8	3.1	3.7	3.9	4.0	4.2	4.0	3.9	3.9	3.1	2.6	1.8
31	...c	...c	...c	1.1	1.1	2.0	1.8	1.9	1.4	1.2	1.0	1.0	0.8	...c	...c	...c	3.8	4.1	4.2	4.2	4.1	4.0	4.1	3.1	2.5	1.8
MEAN*	0.7	0.9	1.1	1.3	1.6	1.8	2.0	1.9	1.7	1.4	1.2	0.9	0.8	2.1	2.6	3.2	3.8	4.0	4.2	4.2	4.1	4.0	3.7	3.1	2.4	1.7

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 147

JANUARY 1941 JANUARY 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	5.3	4.4	3.5	3.4	3.4	2.6	6.1	8.8	10.0	10.2	9.9	8.4	8.6	8.8	9.8	9.9	9.8	10.3	10.9	p10.4	9.6	9.0	9.1	8.7	7.9
2	6.4	5.0	3.9	3.3	3.0	2.7	6.0	8.6	9.6	10.2	10.2	9.0	8.8	9.1	9.3	9.8	10.0	11.0	10.8	10.0	9.5	8.6	p8.3f	p7.5f	8.0
3	...f	...f	...f	3.6	3.5	3.0	6.2	8.6	9.6	9.5	9.4	8.9	8.7	8.4	8.6	8.7	9.0	9.2	10.0	10.2	9.4	8.1	7.8	7.0	...
4	6.0	4.8	4.6	4.3	p4.0f	p3.2f	5.9	8.7	10.0	10.9	10.8	9.8	9.5	9.8	9.6	9.3	9.7	10.0	10.4	10.6	9.9	...f	...f	...f	...
5	...f	...f	...f	...f	2.8	2.4	6.2	8.6	9.6	10.5	11.0	10.9	10.0	10.8	11.0	11.6	11.8	12.3	12.0	10.6	9.8	...	...	...	...
6	...f	...f	...f	...f	...f	...f	5.6	8.4	10.8	11.5	11.0	9.6	9.1	8.8	9.4	10.0	10.5	10.6	10.6	10.6	10.0	...f	...f	...f	...
7	p6.4f	5.5	5.1	4.4	4.2	p3.8f	5.9	8.4	9.6	9.4	8.8	8.6	8.2	7.8	8.4	9.7	10.3	10.6	10.5	10.4	9.4	9.0	7.8	6.8	7.9
8	6.3	5.5	4.7	4.0	3.3	3.8	6.0	8.2	9.8	p9.8c	p9.7c	p9.6c	p9.3c	9.0	9.8	10.4	11.0	10.8	10.0	9.3	9.2	p8.8c	p7.5c	p6.6c	8.0
9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.0	11.8	11.6	p11.0c	p11.7c	p11.2c	11.5	12.3	12.4	12.0	10.7	...f	...f	...f	...
10	...f	...f	...f	...f	...f	...f	5.7	8.1	9.5	9.9	10.0	10.6c	11.2	12.1	12.0	12.1	11.8	12.1	12.2	11.3	10.6	11.0	9.3	7.2	...
11	6.2	5.8	5.7	5.3	4.6	4.0	5.2	7.4	8.0	8.3	9.0	9.9	11.0	11.7	11.1	11.5	11.5	11.4	11.0	9.4f	7.9	p7.8f	p7.6f	p7.0f	8.3
12	...f	...f	...f	5.5	5.2	p4.7f	6.0	7.9	8.8	8.7	8.4	9.6	10.2	10.8	11.5	11.5	11.4	11.2	11.2	11.0	10.4	9.5	9.3	7.5	...
13	6.1	5.3	4.1	3.7	3.4	2.9	4.6	6.6	7.0	7.0	7.6	8.4	9.6	11.0	11.6	11.3	11.7	11.1	...c	...c	...c	...c	...c	...c	...
14	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.8	8.4	8.7	9.2	10.2	10.9	10.9	11.0	10.0	10.3	10.0	9.0	8.2	7.9	6.8	...
15	5.4	4.6	4.1	p3.6f	p3.3f	p2.8f	4.9	7.1	7.5	7.2	6.7	7.6	8.2	9.6	10.4	10.1	9.8	9.8	9.5	9.3	7.5	6.6	6.6	5.8	7.0
16	5.0	4.5	4.2	3.2	2.8	2.4	5.1	7.0	7.0	6.7	7.2	8.2	8.4	9.3	9.8	10.7	11.0	10.4	8.3	...f	...f	...c	...c	...c	...
17	...c	...c	...c	...c	...c	...c	...c	8.2	8.6	7.1	8.0	p7.5c	7.6	8.3	9.8	10.1	10.4	11.2	11.4	11.4	9.7	9.7	9.6	7.4	...
18	6.3	p5.7f	p5.4f	p5.0f	4.5	4.2	5.3	8.2	9.2	8.6	7.6	7.3	7.2	7.4	8.0	8.9	9.8	9.9	9.7	9.5	8.0	7.8	8.5	8.2	7.5
19	6.8	5.4	5.3	4.8	4.5	3.6	5.6	7.8	9.2	9.4	7.6	7.2	7.2	7.6	8.2	8.8	8.6	9.2	10.1	10.0	8.4	6.9	6.8	6.4c	7.3
20	...c	...c	...c	...c	...c	...c	...c	7.4	8.4	9.2	7.8	7.2	7.2	7.4	7.8	7.8	8.1	8.5	8.4	8.3	7.4	6.6	6.1f	5.6	...
21	p5.6	6.3	5.5	4.8	4.5	4.5	5.6	7.4	8.2	9.0	9.2	8.3	7.5	7.6	8.0	8.2	8.3	8.0	8.3	8.6	7.1	5.9	4.9	5.7	7.0
22	5.3	4.4	4.0	4.0	3.8	3.7f	4.8	7.3	8.4	9.2	8.7	7.6	7.1	7.4	7.5	8.0	8.8	8.8	8.3	9.1	8.4	7.9	6.6	6.4	6.9
23	5.7	5.5	4.5	3.8	3.5	2.9	5.5	7.8	8.2	8.6	9.3	10.4	10.8	10.3	10.0	10.1	9.7	8.8	7.8	8.7	8.8	8.8	9.6	9.4	7.9
24	7.9	5.9	...c	...c	...c	...c	...c	...c	...c	10.5	10.6	11.1	10.4	8.4	8.9	9.4	9.8	9.2	8.0	7.9	8.0	7.9	7.4	7.4	...
25	7.4	7.0	6.5	6.6	6.4	5.6	6.9	9.1	10.5	11.0	11.0	10.8	11.0	10.4	10.6	10.8	11.2	11.4	10.8	9.7	8.5	8.2	p7.8c	p7.6c	9.0
26	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.6	9.4	9.9	10.2	10.1	10.2	10.2	p10.7c	p11.2c	10.2	10.2	9.5	9.2	9.0	...
27	8.7	...c	...c	...c	...c	...c	...c	...c	...c	10.1	9.6	9.1	9.0	9.6	10.0	10.4	10.5	10.6	10.9	10.9	10.4	10.1	10.0	10.5	...
28	9.6	7.5	5.8	4.9	3.6	...c	...c	...c	...c	9.9	9.8	9.1	9.2	9.8	10.4	11.0	11.6	11.6	11.7	11.5	...f	...f	...f	...f	...
29	p7.0f	p5.1f	4.6	2.6	2.6	2.0	5.2	9.0	10.6	11.3	11.0	9.4	9.0	9.1	...c	...c	...c	...c	...c	...c	6.9	p6.4f	p6.5f	p7.2f	...
30	p8.3f	6.3	6.2	5.4	4.4	3.9	6.3	9.3	10.3	10.6	8.7	8.4	7.9	8.3	8.6	9.4	10.0	10.1	10.1	9.9	9.0	7.7	8.4	9.3	8.2
31	9.5	7.6	5.3	4.6	4.2	3.0	5.6	8.9	10.4	11.2	10.8	9.6	9.8	9.8	9.8	10.0	10.4	10.8	11.4	11.3	10.6	10.1	10.3	10.0	8.9
MEAN*	6.7	5.6	4.9	4.3	3.9	3.4	5.7	8.1	9.2	9.4	9.3	9.1	9.1	9.4	9.8	10.1	10.3	10.4	10.3	10.1	9.1	8.3	8.0	7.6	8.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 148

JANUARY 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1941

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	330	310	350	310	240	280	270	300	320	350	400	410	400	430	400	410	400	270	290	300	330	320	280	270	332
2	250	260	250	250	260	290	270	300	320	350	380	400	400	430	q405	q375	350	270	290	290	330	360	450	520	335
3	570	520	430	320	240	250	260	310	320	350	380	400	440	430	440	390	410	270	290	300	350	340	350	340	363
4	310	360	400	430	q360f	q290f	270	290	310	350	430	420	450	400	400	360	360	240	270	290	340	370	440	460	358
5	450	410	370	290	270	270	270	300	310	350	370	380	400	400	310	360	340	250	270	320	390	480	q510	q500	357
6	q410f	q380f	350	310	290	380	280	230	310	350	370	380	420	390	410	350	330	250	280	300	400	q435f	q455f	q400f	353
7	360	280	260	270	310	q290f	270	240	330	370	410	420	420	430	410	380	350	350	290	300	330	350	350	340	338
8	300	250	260	270	250	280	280	250	330	...c	...c	...c	...c	380	390	380	330	290	320	360	390	...c	...c	...c	...
9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	350	400	400	q410c	q420c	q400c	390	260	270	310	380	350	330	330	...
10	360	360	310	260	300	290	280	240	330	250	260	390	360	360	380	350	340	240	260	270	320	310	320	340	308
11	360	320	260	240	200	280	260	230	340	380	340	320	330	340	340	360	280	230	280	300	280	410	q420f	q440f	314
12	260	240	230	250	240	250	260	240	320	350	360	340	340	335	330	325	320	230	260	280	300	300	330	320	292
13	290	200	220	230	240	290	270	220	350	400	370	350	340	300	300	335	340	240	...c	...c	...c	...c	...c	...c	...
14	...c	...c	...c	...c	...c	...c	...c	...c	...c	330	350	340	380	350	315	300	305	230	270	250	310	320	370	300	...
15	270	260	300	310	370	320	260	320	310	385	400	385	360	330	300	295	300	315	260	290	330	340	340	320	320
16	290	270	240	240	230	230	250	330	390	390	390	300	360	360	350	280	250	290	380	330	290	...c	...c	...c	...
17	...c	...c	...c	...c	...c	...c	...c	220	340	340	410	q405c	400	335	330	350	345	240	250	280	260	240	230	250	...
18	270	270	250	220	250	200	260	270	330	320	360	390	440	465	350	335	330	240	280	290	310	250	220	220	397
19	230	250	280	275	240	230	250	260	280	340	395	410	390	385	385	360	350	300	250	250	270	300	290	q280c	302
20	...c	...c	...c	...c	...c	...c	...c	260	305	330	370	420	430	360	390	370	385	360	250	255	300	340	320	q300a	...
21	290	270	250	245	250	q260a	240	275	300	330	370	400	350	390	360	260	360	360	260	270	310	290	280	245	301
22	220	250	270	270	280	270	250	260	320	320	380	400	400	425	430	370	340	320	260	270	300	330	340	305	316
23	250	225	220	270	250	250	250	250	280	300	340	350	365	385	360	365	350	335	270	250	220	260	240	230	286
24	230	220	...c	...c	...c	...c	...c	...c	...c	305	330	390	375	370	390	350	355	225	280	350	330	300	310	285	...
25	250	265	260	240	240	220	260	260	270	275	350	355	350	340	350	350	300	290	250	290	320	290	q280c	q275c	289
26	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	320	340	350	330	340	330	310	q300c	q285c	270	280	350	350	380	...
27	255	...c	...c	...c	...c	...c	...c	...c	...c	290	385	360	350	365	340	335	330	230	260	270	290	330	275	240	...
28	230	230	220	220	210	...c	...c	...c	...c	300	360	370	390	360	330	330	330	320	270	310	430	350	420	390	...
29	q240f	240	240	280	270	280	270	220	285	290	320	340	390	365	...c	...c	...c	...c	...c	...c	400	400	360	240	...
30	250	240	240	260	265	260	260	250	280	335	360	370	420	390	380	365	350	250	270	320	340	350	350	260	309
31	225	220	250	250	220	270	260	270	290	330	350	350	350	340	370	335	330	240	250	300	320	320	220	210	286
MEAN*	298	284	280	271	261	271	263	264	315	334	365	373	385	377	367	348	339	274	275	292	325	335	337	321	315

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 149

JANUARY 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1941

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.4	4.9	5.2	5.1	5.1	5.0	5.0	5.2	5.2	5.4	...	...
2	...	4.8	4.9	5.2	5.0	5.1	5.1	5.2	p5.0	p4.8	5.0	...	...
3	...	5.2	4.9	5.0	5.2	5.1	5.2	5.3	5.3	4.9	5.3	...	...
4	...	4.5	5.1	5.2	5.3	5.3	5.4	5.2	5.1	5.0	5.4	...	...
5	...	4.8	5.3	5.5	5.1	5.3	5.4	5.3	5.0	5.3	5.0	...	...
6	...	4.9	5.1	5.1	5.3	5.4	5.1	5.4	5.2	5.2	5.1	...	...
7	...	...	5.3	5.2	5.4	5.4	5.2	5.2	5.2	5.4	5.0	...	...
8	...	...	4.9	p5.1c	p5.3c	p5.3c	p5.1c	5.1	5.4	5.4	4.7	...	...
9	...	...c	p4.8c	p5.2c	5.5	5.5	5.4	p5.4c	p5.5c	p5.4c	5.2	...	...
10	...	...	5.0	5.1	5.4	p5.4c	5.4	5.5	5.5	5.5	5.4	...	...
11	...	...	5.4	5.5	5.5	5.4	5.5	5.5	5.1	5.4	4.7	...	...
12	...	...	4.8	5.0	5.1	5.5	5.4	5.5	5.2	5.4	5.0	...	...
13	...	...	4.9	5.5	5.5	5.4	5.5	5.1	5.3	5.4	4.9	...	...
14	...	...	p4.5c	4.9	5.0	5.4	5.5	5.5	5.2	5.1	4.9	...	...
15	...	4.6	4.5	5.0	5.0	5.0	4.9	4.8	4.7	4.8	4.8	4.7	...
16	...	4.6	5.0	5.0	4.9	4.8	5.4	5.5	5.3	4.3	...	...	...
17	...	...	4.9	4.9	5.0	p5.2c	5.4	5.2	5.3	5.3	5.0	...	...
18	...	4.4	4.9	4.9	5.0	5.0	5.0	5.3	5.0	4.7	4.9	...	...
19	...	4.5	4.5	5.0	5.1	5.0	4.9	5.0	5.0	5.0	4.9	4.4	...
20	...	4.5	4.8	5.0	5.0	4.9	4.8	4.7	4.9	4.8	4.9	4.9	...
21	...	...	4.9	5.0	4.9	4.8	4.7	4.9	4.8	5.0	4.9	4.9	...
22	...	4.3	4.8	5.0	5.0	4.9	4.8	4.9	5.0	4.9	4.8	4.8	...
23	...	4.4	4.9	4.9	5.3	5.2	5.0	4.9	4.8	4.8	4.4	4.5	...
24	...	p4.5c	p4.7c	4.9	5.2	5.1	5.0	5.0	5.0	5.0	4.9	...	...
25	...	4.3	5.0	5.0	5.4	5.0	5.0	5.0	5.0	5.0	4.6	4.4	...
26	...	p4.3c	p4.5c	p4.7c	4.9	5.1	5.2	5.1	5.0	5.0	4.9	...	...
27	...	p4.5c	p4.7c	4.9	5.6	5.2	5.1	5.3	5.2	5.2	4.9	...	...
28	...	p4.8c	p5.0c	5.2	5.2	5.1	5.4	5.0	4.9	5.4	5.4	5.4	...
29	...	...	4.6	5.0	5.0	5.0	5.4	5.1	p5.0c	p5.5c	p5.3c	p5.1c	...
30	...	4.4	4.8	5.0	5.1	5.1	5.5	5.2	5.0	5.4	5.2	...	...
31	...	4.4	4.8	5.0	5.2	5.1	5.1	5.0	5.0	4.9	4.8	...	...
* MEAN	...	4.6	4.9	5.1	5.2	5.2	5.2	5.2	5.1	5.1	5.0	4.8	...

MINIMUM VIRTUAL HEIGHT OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	250	240	260	230	230	230	210	230	260	310	...	...
2	...	280	260	240	240	220	220	220	p210	p215	210	...	...
3	...	220	220	220	210	230	210	220	230	220	230	...	...
4	...	240	240	230	230	240	230	220	220	210	200	...	...
5	...	250	240	230	230	240	230	220	220	230	240	...	...
6	...	240	p235	230	230	220	220	220	230	240	240	...	...
7	...	...	240	230	230	230	220	220	210	230	250	...	...
8	...	...	240	...c	...c	...c	...c	220	240	240	250	...	...
9	...	...c	...c	...c	230	230	220	p210c	p205c	p200c	210	...	...
10	...	...	240	230	240	p220c	200	200	200	200	220	...	...
11	...	...	220	220	220	220	220	200	200	210	210	...	...
12	...	...	210	220	200	210	200	200	200	200	210	...	...
13	...	...	210	200	200	200	220	200	200	200	200	...	...
14	...	...	p210c	200	200	200	200	200	220	210	200	...	...
15	...	220	200	200	270	240	210	190	190	210	220	...	...
16	...	220	200	210	190	190	200	190	230	220	...	...	...
17	...	...	200	200	200	p200c	200	190	220	255	230	...	...
18	...	215	210	210	200	200	190	200	210	195	180	...	...
19	...	225	220	210	200	190	180	200	210	200	200	240	...
20	...	230	220	210	200	205	200	190	200	200	190	240	...
21	...	...	p215a	210	200	200	200	195	190	200	200	240	...
22	...	230	210	220	210	210	200	190	200	200	180	235	...
23	...	230	220	220	210	210	200	200	190	200	220	240	...
24	...	p235c	p230c	230	210	230	220	250	210	210	210	...	...
25	...	230	230	215	210	210	210	230	200	215	220	235	...
26	...	p235c	p235c	p220c	210	200	200	200	200	210	205	...	...
27	...	p230c	p230c	215	220	215	200	200	210	210	210	...	...
28	...	p230c	p235c	220	220	210	200	220	210	200	220	240	...
29	...	...	220	210	210	200	200	200	...c	...c	...c	...c	...
30	...	215	225	210	200	210	210	200	195	200	210	...	...
31	...	230	225	200	200	210	200	200	200	220	230	...	...
* MEAN	...	233	224	218	215	214	208	207	209	214	217	238	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 150

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1941 — JANUARY 1941

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.1	1.1	1.2	1.2	1.8	1.8	2.0	1.9	p1.9b	1.8	1.0	1.0	1.0	2.0	2.2	2.8	4.0	4.1	4.2	4.2	4.3	4.4	4.0	3.1	2.7	1.9
2	1.1	1.1	1.2	1.9	1.9	2.0	1.9	1.9	p1.9	p1.3	1.0	0.9	0.7	2.1	2.8	3.9	4.1	4.1	4.2	4.2	4.2	p4.0	p3.5	3.0	2.0	1.8
3	0.9	1.1	1.2	1.8	1.9	2.0	1.7	1.9	1.9	1.3	1.1	1.0	0.6	2.0	2.8	3.1	4.0	4.1	4.2	4.3	4.3	4.0	3.9	3.2	2.8	1.8
4	0.7	1.0	1.2	1.8	1.8	1.9	1.9	1.8	1.8	1.3	1.1	0.8	0.6	2.2	2.3	3.2	4.1	4.0	4.3	4.3	4.1	4.2	4.0	3.2	2.8	1.9
5	0.8	0.8	1.0	1.2	1.8	1.8	1.9	1.8	2.1	1.2	1.1	0.8	0.8	2.1	2.8	3.5	3.8	4.2	4.3	4.3	4.3	4.2	3.9	3.3	2.6	2.1
6	0.7	0.9	1.1	1.2	1.8	1.9	1.9	2.0	2.0	2.0	1.8	1.8	1.2	1.9	2.8	3.3	3.7	4.0	4.2	4.3	4.2	4.3	3.8	3.2	2.8	2.0
7	0.7	0.8	1.1	1.4	1.9	2.1	2.0	2.0	2.0	2.0	1.4	1.2	0.8	2.0	2.8	3.2	3.8	4.1	4.2	4.3	4.3	4.2	4.0	3.1	2.3	2.0
8	0.7	1.2	1.3	...c	...c	...c	...c	2.0	1.9	1.2	1.0	0.8	0.6	1.9	2.7	3.3	...c	...c	...c	...c	4.1	3.8	3.0	2.6	1.8	0.6
9	...	...	...	...	1.8	1.9	1.9	p1.9c	p1.8c	p1.8c	1.8	0.8	0.6	...c	...c	...c	...c	3.8	4.1	4.0	p4.0c	p4.1c	p4.0c	4.0	2.6	1.9
10	0.7	1.0	1.2	1.7	1.9	p2.0c	2.1	2.1	2.0	1.8	1.7	1.1	1.0	2.0	2.8	3.2	3.6	3.9	p4.0c	4.1	4.1	3.7	3.4	3.2	2.2	1.9
11	0.6	0.9	1.0	1.1	1.7	1.9	1.9	1.9	1.8	1.2	1.2	1.0	1.0	1.8	2.8	2.8	3.4	3.6	3.8	3.8	3.8	3.6	3.5	3.0	2.6	1.9
12	0.6	1.0	1.1	1.2	1.8	1.9	2.0	1.7	1.9	1.9	1.2	1.1	1.0	1.8	2.7	3.2	3.4	3.6	3.7	3.9	2.7	3.5	3.4	3.0	2.3	1.8
13	1.2	0.7	1.0	1.2	1.2	1.8	1.8	1.9	1.2	1.8	1.2	1.1	p1.0c	2.2	2.2	3.0	3.4	3.7	3.8	3.8	3.7	3.5	3.4	3.0	2.7	p1.8c
14	...c	...c	...c	1.2	1.2	1.3	1.8	1.8	1.2	1.2	1.0	0.8	0.7	...c	...c	...c	3.4	3.6	3.7	3.8	3.4	3.6	3.4	3.0	2.8	1.8
15	0.6	0.9	1.1	1.2	2.5	2.0	2.0	1.9	1.8	1.2	1.2	1.1	0.9	1.2	2.3	2.8	3.4	4.3	4.3	4.0	3.7	3.5	3.5	3.0	2.5	1.8
16	0.7	1.0	1.0	1.2	2.3	2.4	1.8	1.9	1.7	0.8	0.8	0.6	0.8	1.2	1.8	2.7	3.3	3.5	3.7	3.8	3.7	4.0	2.5	1.8	1.1	0.8
17	p0.8c	1.0	1.0	1.2	1.2	p1.8c	2.0	1.8	2.0	2.0	1.2	1.1	0.9	p1.4c	2.4	2.8	3.6	3.8	p3.9c	4.0	3.9	4.0	4.2	4.0	2.5	1.7
18	0.6	0.8	1.0	1.2	1.2	1.8	1.7	1.2	1.7	1.2	1.0	0.9	0.6	1.8	2.4	2.2	3.4	3.8	4.0	4.0	4.0	3.9	3.5	3.0	2.5	1.7
19	0.9	1.0	1.1	1.2	1.2	1.8	1.8	1.7	1.2	1.2	1.1	1.0	0.9	1.8	2.5	2.7	3.3	3.8	4.0	4.2	4.0	3.8	3.4	3.0	2.6	1.8
20	p0.8c	1.0	1.0	1.2	1.2	1.2	1.8	1.8	1.2	1.2	1.0	0.9	0.6	p1.6c	2.4	2.9	3.2	3.4	3.8	4.0	3.8	3.7	3.3	3.0	2.5	1.8
21	0.7	0.8	1.0	1.2	1.2	1.8	1.7	1.2	1.2	1.2	1.1	1.0	0.9	0.8	1.8	3.0	3.5	3.5	3.9	4.0	4.0	3.6	3.6	3.0	2.8	1.7
22	0.6	1.0	1.1	1.2	1.1	1.8	2.0	1.7	1.7	1.2	1.1	0.9	0.6	1.6	2.2	2.8	3.3	3.8	4.0	4.0	4.0	3.9	3.7	3.0	2.6	1.9
23	0.7	0.9	1.0	2.0	1.7	1.8	1.9	1.9	1.9	1.2	1.1	1.0	0.9	1.7	2.4	3.2	3.5	3.9	4.0	4.2	4.2	3.9	3.7	3.1	2.6	1.9
24	...c	...c	...c	1.8	1.9	1.9	2.0	2.2	1.9	2.0	1.0	0.9	0.8	...c	...c	...c	3.7	4.0	4.0	4.1	4.2	4.0	3.8	3.0	2.5	1.9
25	0.8	1.0	1.1	1.2	1.8	1.9	2.0	2.0	1.9	1.8	1.2	1.0	0.9	1.8	2.7	3.2	3.9	4.0	4.0	4.2	3.1	4.0	3.8	3.0	2.7	1.8
26	...c	...c	...c	...c	1.8	1.9	1.8	2.0	1.8	1.2	1.2	p1.0c	p1.0c	...c	...c	...c	...c	3.9	4.0	4.2	4.0	4.0	3.6	3.0	p2.5c	p2.0c
27	...c	...c	...c	1.2	1.8	1.8	1.9	1.9	1.8	1.2	1.1	1.0	1.0	...c	...c	...c	3.7	4.0	4.1	4.2	4.1	4.1	3.8	3.1	2.6	1.9
28	...c	...c	...c	1.7	1.8	2.0	2.0	2.0	2.1	1.2	1.1	1.0	0.8	...c	...c	...c	3.8	4.0	4.2	4.2	4.2	4.2	3.9	3.3	2.8	2.0
29	0.8	0.9	1.7	1.2	1.9	2.0	2.0	2.0	...c	...c	...c	...c	...c	1.7	2.7	3.2	3.8	4.0	4.3	4.3	4.3	...c	...c	...c	...c	...c
30	0.8	0.9	1.0	1.2	1.7	1.9	2.0	1.8	1.9	1.4	1.2	0.9	0.8	1.8	2.6	3.1	3.6	3.8	4.0	4.0	3.9	4.0	3.8	3.1	2.8	1.8
31	0.6	0.8	1.0	1.2	1.7	1.8	1.8	1.8	1.8	1.9	1.2	1.1	0.9	1.8	2.6	2.9	3.5	4.0	4.1	4.3	4.1	4.2	4.0	3.5	2.8	2.0
MEAN*	0.8	1.0	1.1	1.4	1.7	1.9	1.9	1.8	1.8	1.5	1.2	1.0	0.8	1.8	2.5	3.0	3.6	3.9	4.0	4.1	4.0	3.9	3.6	3.1	2.5	1.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 151

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1941

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.4	5.4	4.4	4.2	4.4	4.8	4.9	8.2	10.0	10.9	10.4	8.1	7.6	7.8	8.0	8.4	9.0	9.4	9.7	10.0	9.4	9.0	9.3	8.4	7.9
2	7.6	6.6	5.8	5.5	4.9	3.7	6.1	8.0	8.8	9.2	10.4	11.0	10.2	8.5	8.2	8.2	8.9	9.5	10.0	10.0	9.0	7.9	7.3	8.0	8.0
3	7.8	6.8	6.2	5.0	5.0	5.1	7.4	9.7	9.6	11.0	11.7	11.8	11.2	9.2	8.3	8.3	8.7	8.6	8.9	8.9	8.2	p7.6a	p7.0a	6.3	8.3
4	6.8	6.0	5.0	4.6	p4.5f	p4.7f	4.9	8.3	10.6	11.1	11.0	11.2	12.1	12.3	12.7	12.5	11.5	9.7	9.4	9.5	8.4	7.5	6.6	6.8	8.7
5	7.0	6.4	5.4	5.6	6.5	6.4	6.8	9.2	11.4	11.5	12.2	12.3	12.5	13.0	13.0	11.9	10.4	9.6	9.5	9.4	7.4	6.8	p6.2f	p5.6f	9.0
6	5.0	5.0	5.7	p5.8f	p5.4f	p5.0f	5.5	8.6	10.6	11.7	13.1	12.5	13.0	13.2	p13.1c	p11.7c	10.4	8.4	8.4	8.0	7.2	7.0	8.2	8.6	8.8
7	8.6	8.4	8.2	8.8	8.2	8.1	4.8	8.4	10.2	11.6	12.9	13.7	13.3	13.5	13.4	12.0	p11.4c	p10.8c	p10.2c	9.6	7.9	...f	...f	...f	...
8	p8.3f	p7.7f	p7.3f	6.9	5.4	3.6	5.4	7.6	8.8	9.0	9.6	10.3	10.8	11.4	12.0	12.9	12.7	12.4	12.3	11.1	9.4	8.8	8.4	8.3	9.2
9	8.0	6.7	6.4	6.3	p5.3f	p5.0f	4.7	7.9	9.6	10.2	10.6	10.8	11.3	12.2	13.1	13.2	13.1	13.0	13.0	12.5	10.3	10.4	10.2	10.1	9.8
10	10.2	10.2	p8.8f	p7.3f	5.8	5.0	6.3	8.4	9.2	9.1	9.1	9.4	10.0	10.4	10.6	11.3	11.3	11.3	11.6	10.8	10.2	10.3	10.2	10.0	9.4
11	9.4	8.4	7.4	7.2	p6.8f	6.4	6.6	7.2	7.4	7.6	7.6	8.2	9.0	9.5	10.4	11.4	11.3	11.3	11.1	10.8	10.6	8.3	7.6	6.8	8.7
12	5.6	4.2	3.4	3.1	3.3	3.3	4.6	7.0	7.9	7.8	7.6	7.8	8.4	9.0	9.8	10.1	10.8	11.0	11.3	11.2	9.7	8.9	8.2	9.4	7.7
13	9.3	6.9	5.1	2.8	1.6	1.2	5.0	7.8	9.2	9.4	9.3	9.8	8.8	9.2	9.9	10.9	11.9	11.6	11.4	11.3	10.8	9.8	8.5	8.4	8.3
14	7.1	6.5	5.4	4.8	5.2	5.6	4.8	8.0	9.6	10.3	8.8	7.7	7.6	8.1	9.5	10.6	11.3	11.4	11.8	11.8	10.2	9.1	9.2	9.2	8.5
15	8.6	6.6	6.0	6.5	5.1	3.6	5.2	8.1	9.6	9.9	9.7	9.6	10.1	10.6	11.2	11.4	11.9	12.5	11.9	11.0	11.0	p10.2f	p9.4f	p8.6f	9.1
16	8.2	6.2	5.0	4.9	4.9	4.8	5.9	8.4	9.1	9.4	7.8	7.1	7.0	7.4	8.0	8.2	9.2	9.6	9.8	9.6	8.7	8.6	8.8	8.2	7.7
17	8.2	7.8	6.2	5.8	5.7	4.9	5.0	6.9	7.6	8.9	9.9	9.6	8.0	8.0	8.7	9.0	9.8	10.3	10.6	10.3	10.0	p9.0f	8.2	6.7	8.1
18	p6.6f	6.5	5.5	5.0	4.2	2.9	4.6	7.1	8.8	9.8	9.5	8.6	8.1	8.1	8.4	8.7	9.3	9.0	8.9	9.0	9.4	9.7	10.0	9.3	7.8
19	8.4	7.8	6.6	5.3	4.5	2.3	4.6	7.3	8.8	10.1	10.3	10.2	9.7	9.5	10.4	11.0	10.6	9.8	7.8	7.3	6.9	7.0	7.8	9.2	8.0
20	10.0	8.8	7.4	6.2	4.4	3.4	4.8	7.3	8.6	9.9	10.8	11.6	11.6	11.2	12.0	12.0	12.1	11.7	11.4	11.2	10.8	10.4	10.8	9.9	9.5
21	10.6	8.8	7.0	5.3	4.6	4.0	5.5	7.8	9.4	10.1	10.1	9.0	9.8	10.4	11.1	11.0	10.3	8.7	8.6	9.0	9.5	9.6	8.6	8.9	8.6
22	9.6	9.3	8.6	7.5	7.2	5.6	5.2	8.7	10.0	10.9	11.2	11.4	9.8	10.5	11.6	11.7	11.7	12.2	12.0	12.0	12.0	12.1	11.5	11.2	10.2
23	11.2	9.0	7.6	7.8	7.8	8.0	7.9	9.5	10.4	10.6	10.2	10.2	9.8	9.0	9.0	9.8	10.2	10.2	10.4	10.0	9.8	10.1	10.3	9.4	9.5
24	8.2	7.3	6.7	6.6	6.0	5.9	7.2	9.6	10.7	11.8	11.8	9.8	9.6	10.1	10.0	10.0	10.2	10.0	9.9	9.4	8.4	8.3	9.5	9.3	9.0
25	8.6	7.4	6.4	4.8	4.0	3.6	5.2	8.0	10.1	10.9	11.5	11.5	11.0	10.7	10.6	10.8	11.4	11.6	11.7	11.3	10.4	9.9	9.7	10.0	9.2
26	9.6	8.9	7.6	6.8	6.9	6.6	7.4	9.8	11.0	11.5	11.6	9.5	9.2	9.4	9.5	10.2	11.1	11.6	11.5	11.2	9.0	p9.2f	9.3	10.4	9.5
27	10.5	p8.8c	7.0	5.2	4.4	3.2	5.0	8.4	p9.8c	11.1	11.0	p10.6b	10.1	9.9	9.2	p9.7c	10.2	10.4	10.7	10.0	p9.4f	p8.8f	8.2	8.8	8.8
28	8.6	7.4	6.2	5.4	5.0	4.6	5.8	8.4	9.9	10.9	11.4	11.1	9.3	8.7	9.0	9.4	9.7	10.0	10.0	9.2	8.1	p7.4f	5.8	5.9	8.2
29																									
30																									
31																									
MEAN*	8.4	7.3	6.4	5.8	5.2	4.7	5.6	8.2	9.5	10.2	10.4	10.2	10.0	10.0	10.4	10.6	10.7	10.6	10.5	10.2	9.4	8.9	8.7	8.6	8.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 152

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1941 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — FEBRUARY 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	200	220	250	270	290	250	260	250	290	305	340	370	410	390	370	360	325	320	270	310	330	300	270	255	300
2	250	250	270	260	260	240	230	240	250	280	335	360	370	380	380	330	340	240	280	290	350	340	300	280	296
3	250	270	300	280	300	250	260	260	280	310	320	330	340	370	380	330	330	240	270	340	390	q340a	q280a	220	302
4	210	230	260	300	280	270	250	260	270	280	290	335	330	335	320	335	310	220	260	300	340	360	350	270	290
5	220	200	240	230	270	270	260	260	270	280	310	325	335	360	330	310	330	215	280	330	395	370	440	300	297
6	230	230	260	275	270	310	280	240	290	290	310	300	340	320	q310c	320c	330	240	270	310	320	360	240	240	287
7	230	260	240	230	270	300	275	240	280	285	310	300	300	330	315	300	270	220	270	300	380	330	360	350	289
8	300	290	270	240	220	240	270	230	290	315	340	345	330	330	310	320	285	235	270	290	380	350	285	300	293
9	280	290	290	270	280	290	260	230	280	290	300	330	325	325	310	315	310	240	260	280	350	280	290	300	291
10	265	290	285	280	280	270	280	240	300	310	320	290	280	350	350	310	290	240	260	290	280	290	250	230	285
11	250	250	275	275	280	240	260	290	310	340	350	350	350	340	310	290	280	290	260	260	240	230	230	220	282
12	235	260	260	290	280	260	265	235	310	340	335	360	360	340	330	320	290	230	270	300	335	335	310	260	296
13	230	220	230	210	230	270	255	230	295	330	320	340	355	355	310	300	295	250	250	260	230	230	270	270	272
14	295	325	320	300	280	250	270	220	290	320	355	360	400	370	340	310	300	300	270	300	300	340	340	260	309
15	200	250	250	260	240	240	255	230	280	320	330	325	340	320	335	290	290	260	245	320	350	365	400	370	295
16	300	310	300	290	280	250	250	260	280	360	290	400	400	390	360	360	325	250	270	290	330	325	240	260	307
17	250	230	270	280	290	220	240	240	260	290	360	360	360	350	330	325	330	240	280	320	330	290	300	270	292
18	220	240	230	240	240	260	270	280	310	325	340	370	350	375	330	340	320	240	250	290	270	270	300	300	290
19	285	260	260	240	225	230	260	230	290	300	330	340	350	340	325	325	330	225	270	320	360	310	270	230	288
20	220	220	220	230	220	240	260	240	270	285	320	310	350	330	330	320	300	240	260	270	270	260	250	255	270
21	230	230	230	240	250	240	260	260	280	325	360	350	370	340	340	350	330	330	270	250	260	240	250	240	284
22	240	240	270	325	280	230	250	250	275	300	320	340	340	350	340	335	340	250	270	290	270	260	250	250	286
23	240	240	260	270	330	250	265	235	290	295	330	320	350	340	325	330	325	255	270	399	280	240	230	230	283
24	230	230	250	300	350	310	280	230	280	310	325	335	340	340	310	315	310	240	280	350	370	380	240	230	297
25	230	210	230	240	230	240	280	250	290	320	330	320	315	340	320	330	315	255	290	330	340	320	340	260	289
26	240	250	280	290	260	220	240	250	290	300	330	300	310	350	315	300	300	260	280	360	420	380	290	240	294
27	230	220	240	250	240	240	260	250	290	320	330	q340b	q350b	365	380	q335c	290	245	270	360	470	310	270	220	295
28	210	230	230	250	250	290	270	240	285	310	330	335	355	375	345	350	330	250	280	370	520	465	270	250	308
29																									
30																									
31																									
MEAN*	242	248	260	265	267	256	261	245	285	308	327	337	347	350	334	323	312	252	269	307	338	317	290	263	292

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 153

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1941

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.9	5.4	5.4	5.2	5.5	5.2	5.0	4.9	4.9	4.7	...
2	...	...	4.8	4.9	5.0	5.0	5.2	5.2	5.0	5.0	4.9	...	...
3	...	4.4	4.8	5.4	5.5	5.2	5.1	5.1	5.0	4.9	4.9	...	...
4	...	4.4	4.7	4.9	5.4	5.4	5.1	5.1	5.0	5.0	4.6	...	...
5	...	4.3	4.9	4.9	5.0	5.4	5.4	5.0	5.1	4.9	4.9	...	...
6	...	...	4.8	5.0	5.2	5.1	5.4	5.2	p5.1c	p5.0c	4.9	...	...
7	...	...	4.7	4.9	5.1	5.0	5.2	5.5	5.1	5.3	...	...	...
8	...	...	4.8	5.0	5.0	5.1	5.0	5.1	5.0	5.1	4.5	...	...
9	...	...	4.8	5.0	5.0	5.3	5.0	5.0	5.3	5.0	5.4	...	...
10	...	...	4.9	5.0	4.9	5.0	4.9	5.1	5.0	4.9	4.6	...	...
11	...	4.4	4.5	5.0	5.2	5.0	5.0	5.0	5.2	5.0	4.8	4.6	...
12	...	...	4.9	4.9	5.0	5.1	4.9	4.9	4.8	4.9	4.7	...	...
13	...	...	4.9	4.9	5.0	5.0	5.0	5.0	5.2	4.9	4.8	...	...
14	...	...	4.9	4.9	5.0	4.9	5.0	5.0	4.9	5.0	4.7	4.7	...
15	...	...	4.8	4.9	5.0	5.0	5.0	5.0	5.3	4.9	4.8	4.3	...
16	...	4.2	4.6	5.0	4.9	5.0	5.0	4.8	5.0	4.8	4.7	...	...
17	...	...	4.8	5.0	5.0	4.9	4.9	4.9	4.6	5.0	4.9	...	...
18	...	4.4	4.7	5.0	4.9	5.0	4.9	5.0	4.8	5.0	4.6	...	...
19	...	...	4.6	5.0	5.1	5.0	5.0	4.9	4.9	4.9	4.8	...	...
20	...	...	4.8	5.1	5.0	5.0	5.1	5.0	5.0	4.8	4.5	...	...
21	...	4.2	4.9	5.1	5.0	5.0	5.0	5.0	5.0	4.9	4.8	4.5	...
22	...	4.4	5.1	5.1	5.1	5.0	5.1	5.2	5.0	5.3	5.0	...	...
23	...	...	5.0	5.0	5.1	5.1	5.0	5.0	4.9	4.9	4.8	...	...
24	...	...	4.9	5.0	5.2	5.1	5.1	5.0	5.0	4.9	4.8	...	...
25	...	...	4.9	5.0	5.1	5.0	5.0	5.0	4.9	4.9	4.7	...	...
26	...	...	4.9	4.9	5.0	5.0	5.1	5.0	5.0	4.8	4.9	...	...
27	...	...	4.8	5.2	5.2	p5.2b	p5.1b	5.0	5.0	p4.9c	4.8	...	...
28	...	...	4.9	4.9	5.1	5.1	5.0	5.0	5.0	4.9	4.8	...	...
29													
30													
31													
* MEAN	...	4.3	4.8	5.0	5.1	5.1	5.1	5.0	5.0	5.0	4.8	4.6	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	225	230	220	200	210	195	190	190	200	240	...
2	...	...	210	210	200	200	200	200	190	200	200	...	...
3	...	240	220	210	210	210	200	220	200	200	200	...	...
4	...	220	230	210	210	220	200	220	190	200	200	...	...
5	...	240	210	210	200	200	210	210	210	200	210	...	...
6	...	...	230	210	220	210	200	215	p215c	p210c	210	...	...
7	...	...	220	230	215	210	205	200	200	p210c	p215c	...	...
8	...	...	240	230	230	215	220	215	210	220	200	...	...
9	...	...	200	220	210	225	210	200	200	210	220	...	...
10	...	...	220	230	200	210	200	210	200	200	200	...	...
11	...	230	200	220	210	210	200	200	210	220	200	230	...
12	...	...	230	220	200	220	200	200	210	230	220	...	...
13	...	...	220	230	220	210	210	200	190	220	240	...	...
14	...	...	220	210	210	210	210	225	230	220	220	235	...
15	...	...	210	220	210	210	220	210	200	220	220	240	...
16	...	240	230	220	240	220	210	210	205	210	200	...	...
17	...	...	230	240	230	220	210	200	200	200	220	...	...
18	...	250	240	230	210	230	220	200	220	210	230	...	...
19	...	...	240	230	220	210	215	240	200	225	220	...	...
20	...	...	240	220	220	220	220	215	210	200	200	...	...
21	...	230	220	220	240	240	230	220	230	225	230	240	...
22	...	230	210	220	220	210	220	230	230	240	230	...	...
23	...	...	210	230	220	205	230	220	220	220	240	...	...
24	...	...	p220c	240	230	240	245	230	200	230	235	...	...
25	...	...	230	230	240	230	220	230	200	230	240	...	...
26	...	...	p220c	220	215	230	210	200	220	p225b	235	...	...
27	...	...	260	240	230	p240b	p235b	230	230	p220c	210	...	...
28	...	...	200	210	230	220	210	210	210	230	220	...	...
29													
30													
31													
* MEAN	...	235	223	223	218	217	213	213	208	215	217	237	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 154

FEBRUARY 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1941

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.9	1.1	1.2	1.2	1.7	1.7	1.2	1.1	1.0	1.0	1.0	0.6	1.6	2.5	3.1	3.6	3.9	4.0	4.0	4.0	4.0	3.7	3.1	2.7	0.9
2	0.7	1.0	1.1	1.7	1.8	1.7	1.8	1.7	1.7	1.2	1.1	1.0	0.9	1.7	2.6	3.1	3.5	3.8	4.0	4.0	4.1	4.1	3.6	3.2	2.7	1.9
3	0.7	0.9	1.0	1.0	1.1	1.7	1.8	1.8	1.7	1.2	1.1	1.0	0.8	1.8	2.6	3.1	3.7	3.6	4.0	4.1	4.0	4.1	3.8	3.1	2.7	1.8
4	0.6	0.9	1.0	1.2	1.9	1.9	1.9	1.9	1.8	1.7	1.1	1.0	0.8	1.7	2.6	3.1	3.7	4.0	4.1	4.0	4.1	4.0	3.8	3.1	2.8	1.8
5	0.7	0.8	1.0	1.1	1.9	2.0	2.0	1.8	1.9	1.2	1.0	0.8	0.6	1.8	2.6	3.2	3.5	3.9	4.0	4.0	4.0	3.8	3.5	3.0	2.6	1.9
6	0.6	1.0	1.1	1.9	2.0	2.0	2.1	2.0	p1.7c	p1.4c	1.1	1.0	0.8	2.4	2.8	3.4	3.9	4.0	4.1	4.1	4.1	p3.6c	p3.1c	2.6	2.6	1.8
7	0.6	0.7	1.0	1.2	1.2	1.9	1.8	1.9	1.4	p1.4c	1.4	1.2	1.2	1.6	2.6	3.1	3.8	3.8	4.0	4.0	4.0	4.0	p3.5c	p3.0c	2.5	1.7
8	0.6	1.0	1.1	1.2	1.8	1.9	1.9	1.8	1.7	1.2	1.1	1.0	0.8	1.7	2.0	3.1	3.5	3.8	4.0	4.0	4.0	3.5	3.6	3.0	2.7	1.8
9	0.6	0.8	0.7	1.1	1.2	1.1	1.2	1.2	1.3	1.1	1.1	0.9	0.8	1.5	2.3	2.5	3.4	4.0	4.0	4.1	3.7	3.9	3.8	3.0	2.5	1.9
10	0.6	0.8	1.0	1.1	1.2	1.8	2.0	2.0	1.2	1.2	1.2	0.8	0.8	1.9	2.5	3.0	3.6	3.8	4.0	4.1	4.0	3.8	3.7	3.0	2.5	1.7
11	0.7	0.7	1.0	1.2	1.1	1.2	1.3	1.3	1.8	1.0	1.0	0.8	0.8	1.7	2.0	3.0	3.5	3.8	3.9	4.0	4.0	3.8	3.8	2.9	2.6	1.6
12	0.5	1.2	1.3	1.2	1.1	1.8	1.8	1.2	1.2	1.2	1.0	0.8	0.6	1.4	2.4	3.0	3.4	3.8	3.9	4.0	3.9	3.8	3.8	3.2	3.4	1.7
13	0.7	0.9	1.0	1.2	1.2	1.2	1.3	1.8	1.8	1.2	1.1	1.0	0.6	1.6	1.4	2.9	3.5	3.7	4.0	4.0	4.1	3.9	3.3	3.1	2.4	1.5
14	0.6	0.8	1.0	1.1	1.2	1.2	1.3	1.8	1.8	1.3	1.1	0.8	0.6	1.4	2.2	2.8	3.5	3.7	4.0	4.1	4.0	3.8	3.7	3.0	2.5	1.8
15	0.8	0.8	1.0	1.1	1.2	1.2	1.3	1.9	1.8	1.3	1.1	0.7	0.6	1.6	2.5	3.1	3.7	3.8	4.0	4.0	4.2	4.0	3.7	3.0	2.4	1.6
16	0.7	0.7	0.9	1.2	1.3	1.9	1.8	1.9	1.3	1.2	1.2	0.9	0.6	1.4	2.2	2.8	4.0	4.1	4.2	4.2	4.1	4.0	3.7	3.0	2.6	1.7
17	0.6	0.8	1.1	2.0	1.4	1.9	1.7	1.4	1.2	1.2	1.1	1.0	0.8	1.5	2.6	3.0	3.2	4.0	4.1	4.2	4.0	4.0	3.8	3.1	2.5	1.5
18	0.7	0.9	1.0	1.1	1.2	1.8	1.8	1.7	1.2	1.2	1.1	1.0	0.8	1.6	2.4	2.6	3.4	[illegible]	4.2	4.2	4.1	4.0	3.8	3.0	2.2	1.7
19	0.8	0.8	1.1	1.2	1.2	1.2	1.8	1.9	1.3	1.2	1.0	1.0	0.7	1.6	2.6	2.8	3.5	3.8	4.1	4.2	4.2	4.0	3.7	3.0	2.5	1.7
20	0.6	0.7	1.2	1.2	1.2	1.9	2.0	2.1	1.9	1.2	1.1	1.0	0.8	1.5	2.4	3.1	3.9	4.0	4.0	4.2	4.2	4.0	3.9	3.0	2.6	1.8
21	0.8	1.0	1.2	1.2	1.2	1.9	1.9	1.9	1.9	1.2	1.1	1.0	0.9	1.6	2.5	3.0	3.1	4.0	4.2	4.2	4.1	4.0	3.9	2.9	2.4	1.8
22	0.6	0.9	1.1	1.2	1.8	1.9	2.0	2.0	2.0	1.8	1.7	1.0	0.8	1.6	2.6	3.0	3.6	4.0	4.1	4.2	4.2	4.3	4.0	3.1	2.6	1.7
23	0.7	0.8	1.1	1.0	1.3	1.3	2.1	2.0	1.8	1.3	1.2	1.1	0.9	1.6	2.4	3.0	3.8	4.0	3.0	4.2	4.1	4.1	3.8	3.0	2.6	1.7
24	0.7	0.8	p1.2c	1.9	1.8	1.8	2.0	1.8	1.8	1.2	1.4	1.1	0.9	1.6	2.6	p2.8c	3.0	4.0	4.4	4.4	4.2	4.0	3.8	3.0	2.7	1.8
25	0.8	0.8	1.2	1.2	1.2	2.0	1.9	1.9	2.0	1.9	1.2	0.9	0.7	1.2	2.1	2.2	4.0	4.2	4.2	4.3	4.3	4.1	4.0	3.1	2.7	1.7
26	1.1	1.3	1.2	1.2	2.0	2.0	2.1	2.1	p2.0b	p2.0b	2.0	1.2	0.9	1.9	2.6	3.2	3.8	4.1	4.2	4.2	4.1	4.3	p4.0b	3.2	2.6	1.8
27	1.2	1.2	1.4	2.1	1.9	...b	...b	...b	...b	...c	1.9	1.2	1.0	1.9	2.6	3.2	4.1	4.1	...b	...b	...b	...b	...c	3.2	2.6	1.6
28	0.6	1.1	1.2	1.9	2.0	2.2	2.1	1.9	2.0	1.9	1.1	1.0	0.8	1.7	2.6	3.1	4.0	4.2	4.3	4.4	4.3	4.1	4.1	3.1	2.6	1.6
29																										
30																										
31																										
MEAN*	0.7	0.9	1.1	1.3	1.4	1.7	1.8	1.8	1.7	1.3	1.2	1.0	0.8	1.6	2.4	3.0	3.6	3.9	4.0	4.1	4.1	4.0	3.7	3.0	2.6	1.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 155

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1941 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MARCH 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.8	6.2	4.0	3.5	7.4	2.0	5.2	7.5	9.3	9.3	9.4	13.7	11.2	8.2	10.3	10.6	11.5	12.2	12.7	10.4	7.0	5.2	4.6	4.0	8.0
2	2.8	2.6	2.5	2.2	2.3	p2.0b	4.9	8.5	10.0	10.5	11.8	12.2	11.2	9.5	10.3	12.0	12.8	13.3	12.5	11.9	12.1	12.6	12.9	11.4	9.0
3	11.2	11.1	10.2	9.4	8.6	8.0	7.6	9.2	10.4	11.8	11.8	9.6	8.2	8.0	9.5	10.0	10.0	10.0	9.6	8.9	9.0	p9.8a	10.7	9.6	9.7
4	9.5	7.7	6.3	6.8	6.6	5.0	5.0	8.2	10.1	11.8	11.7	10.4	10.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
5	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	11.8	12.9	12.2	11.0	9.3	9.4	10.2	10.2	10.0	9.8	9.5	9.6	10.2	10.6	...
6	10.7	10.1	...c	...c	...c	...c	...c	9.3	10.7	11.2	11.1	...c	...c	...c	...c	...c	8.7	9.3	8.6	7.6	6.8	p6.8f	6.7	p7.2f	...
7	7.8	7.0	5.4	5.0	4.8	3.5	5.0	8.0	9.5	10.7	11.3	11.1	10.3	10.0	9.7	10.2	10.2	10.1	9.4	8.8	8.6	9.2	8.6	9.4	8.5
8	9.2	7.6	5.4	4.1	3.5	3.2	5.0	8.0	9.7	10.8	10.6	10.3	9.7	9.6	10.0	10.1	10.5	10.5	10.1	10.9	7.1	8.0	8.2	9.0	8.4
9	10.3	7.4	6.4	6.0	5.3	p4.6f	4.0	7.6	10.0	10.2	9.6	9.0	8.9	8.3	8.4	9.0	9.3	9.2	8.6	7.9	6.8	7.7	7.6	7.8	7.9
10	6.7	5.0	4.3	3.9	4.0	3.8	4.9	7.6	9.4	9.5	9.1	9.2	9.2	9.1	9.2	9.7	9.8	9.5	8.6	8.0	7.5	7.7	8.0	10.1	7.7
11	10.02	8.6	6.6	5.5	4.6	4.4	5.1	7.0	8.1	7.8	7.6	7.7	8.0	8.4	9.0	9.4	9.9	9.8	9.4	8.3	9.2	9.4	10.2	10.4	8.1
12	9.8	8.7	7.0	5.4	4.2	3.1	4.8	7.9	9.7	10.3	9.3	9.7	10.0	10.2	10.7	11.0	11.2	11.6	11.4	11.4	11.8	11.3	10.2	9.4	9.2
13	7.9	8.0	6.8	6.2	4.6	3.6	4.4	7.1	8.1	8.2	8.3	8.3	8.4	8.6	8.7	9.3	10.1	10.4	9.8	8.4	p8.9a	p8.2a	p7.6a	p7.0a	7.8
14	6.2	4.3	4.4	4.5	p3.9f	p3.4f	4.2	8.0	10.2	11.5	11.0	8.6	8.7	8.9	9.4	9.9	10.6	11.5	11.6	10.4	9.6	10.1	10.6	10.4	8.4
15	9.6	7.0	5.4	4.5	3.4	2.8	5.0	8.8	10.5	10.9	9.0	8.7	8.4	8.2	9.2	10.1	11.4	11.8	11.6	11.0	11.4	11.8	10.9	9.1	8.8
16	7.9	5.8	4.6	4.0	3.0	2.2	4.4	7.8	9.6	8.8	7.6	7.2	7.0	7.2	8.0	8.4	9.2	9.7	10.0	9.4	9.5	9.3	9.3	9.4	7.5
17	6.9	5.6	4.5	3.4	2.1	1.5	4.4	7.4	9.0	10.1	9.9	8.4	8.4	8.4	8.8	9.6	10.4	11.0	11.0	10.5	11.0	10.0	10.2	9.5	8.0
18	8.4	6.2	3.4	1.8	1.0	p2.5b	4.2	7.5	9.5	10.4	10.5	9.1	8.4	8.0	7.9	7.9	8.1	8.7	9.0	8.5	p9.3f	10.1	8.5	8.6	7.4
19	8.0	6.9	4.6	3.8	3.6	3.6	4.9	7.8	9.7	10.2	11.6	12.0	12.3	11.2	8.4	8.8	p9.2c	9.6	p9.4c	p9.3c	9.2	p8.7f	8.2	8.2	8.3
20	8.4	6.8	5.8	5.0	4.6	4.8	5.8	8.6	10.2	11.4	12.2	11.2	9.5	9.9	10.0	10.0	10.0	9.8	9.0	8.8	8.4	8.5	9.0	9.1	8.6
21	8.6	8.8	7.0	5.6	5.8	5.8	6.3	8.2	9.6	9.8	9.7	9.4	9.2	9.5	9.1	8.4	9.6	10.4	10.6	10.0	10.5	10.4	9.1	9.3	8.8
22	9.2	8.2	5.0	5.5	4.2	3.4	5.0	9.0	10.8	10.8	9.0	8.4	8.6	9.1	10.0	10.4	10.8	10.3	11.4	10.5	10.4	10.5	10.4	10.5	8.8
23	10.4	9.3	7.5	5.3	3.8	3.0	4.8	8.2	9.8	10.6	10.7	10.4	10.0	10.0	11.0	11.3	11.2	11.0	10.4	10.0	9.2	9.7	9.2	9.0	9.0
24	9.5	8.0	6.2	4.7	3.8	3.0	4.8	8.0	9.7	10.2	9.8	9.4	9.6	9.8	10.4	10.6	11.0	10.7	10.2	9.6	9.4	9.0	8.7	8.0	8.5
25	7.3	7.2	5.4	4.2	3.2	2.4	4.5	8.2	10.0	11.2	11.1	10.0	10.0	10.4	10.7	11.4	11.8	12.2	11.2	9.2	7.4	p7.7f	p8.0f	8.2	8.4
26	8.2	6.7	5.5	4.3	3.1	1.9	4.4	8.2	10.2	10.2	8.8	8.3	8.4	9.0	9.6	10.0	10.1	9.7	9.6	9.7	9.9	9.5	9.2	8.4	8.0
27	8.4	7.2	4.6	3.1	2.4	2.2	4.4	7.8	9.7	9.6	8.4	8.0	8.2	8.7	9.3	9.8	9.8	9.2	8.9	8.0	6.8	p7.0f	p7.1f	7.2	7.3
28	6.6	5.1	3.9	3.2	1.8	p3.1b	4.6	8.2	10.1	9.7	8.4	9.3	10.4	10.3	10.4	10.8	10.5	10.4	11.3	11.1	10.5	11.0	10.4	10.5	8.4
29	10.5	10.7	9.7	7.2	6.6	5.6	5.8	9.2	10.7	11.1	11.6	11.2	9.9	10.2	10.1	10.6	10.4	9.8	9.7	11.2	11.0	10.8	10.8	10.5	9.8
30	10.9	11.0	10.0	9.0	7.8	7.4	9.2	10.5	11.4	11.6	11.9	11.3	9.0	8.0	9.0	10.6	10.2	10.4	10.8	10.2	11.2	11.4	11.0	11.2	10.2
31	8.6	7.3	6.6	6.0	5.6	7.4	6.3	9.4	10.4	11.0	11.3	11.0	9.0	9.0	9.5	9.6	10.4	10.8	11.2	10.2	10.3	10.6	10.8	11.0	9.3
* MEAN	8.6	7.4	5.8	4.9	4.3	3.8	5.1	8.2	9.9	10.4	10.2	9.9	9.4	9.2	9.5	10.0	10.3	10.4	10.3	9.7	9.3	9.4	9.2	9.1	8.5

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 156

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1941 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — MARCH 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED—75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	220	230	250	280	730	290	275	290	325	310	390	430	300	330	300	295	250	240	220	240	240	245	230	298
2	290	350	400	450	460	q355b	250	240	265	280	295	330	330	330	300	300	300	260	270	305	300	250	230	220	307
3	240	260	290	290	325	280	240	250	280	290	300	350	350	325	325	300	310	240	275	330	460	360	250	230	298
4	225	230	250	245	260	230	250	260	280	310	315	320	340	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
5	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	310	315	325	320	330	300	320	250	280	320	310	300	250	240	...
6	225	220	255	270	300	250	250	250	285	300	330	...c	...c	...c	...c	...c	300	230	275	390	400	320	330	300	...
7	230	240	250	270	230	250	270	250	290	310	330	335	310	340	330	330	315	250	270	335	320	240	250	210	281
8	210	220	235	240	250	285	290	250	290	300	340	340	330	330	320	310	310	245	280	365	390	285	300	230	289
9	220	220	240	235	290	390	280	260	300	310	350	315	360	360	330	350	300	300	270	350	420	400	250	220	305
10	230	230	255	220	300	270	280	270	290	300	330	330	340	310	335	300	300	255	280	330	390	340	240	220	289
11	310	230	230	240	240	275	300	240	300	330	360	360	370	360	340	320	330	250	275	310	300	230	240	230	290
12	240	240	250	260	240	240	260	285	300	300	325	350	350	350	350	330	320	260	280	280	260	230	240	240	283
13	250	250	290	300	350	340	280	240	290	300	360	360	350	375	350	310	310	250	280	400	q375a	q350a	q325a	q300a	316
14	290	270	250	290	450	360	280	240	280	300	320	360	340	330	325	300	260	360	260	350	310	240	230	210	300
15	230	210	250	240	250	280	280	250	300	310	335	360	355	330	350	320	300	250	290	330	290	240	240	230	284
16	230	250	260	250	250	260	280	250	300	350	375	370	380	390	365	340	320	300	270	370	350	290	260	220	303
17	230	240	240	270	250	265	260	265	295	300	360	360	360	350	330	330	295	245	270	360	400	340	310	260	299
18	215	210	230	250	q260b	q270b	280	265	290	300	350	350	360	370	350	350	330	260	270	290	340	300	240	230	290
19	230	220	240	250	275	290	280	250	270	300	300	300	360	330	350	350	q310c	270	q300c	q340c	370	360	280	260	295
20	240	240	260	280	280	290	280	280	290	300	325	340	350	350	325	335	345	270	280	350	340	290	250	240	296
21	230	230	240	270	260	270	280	300	300	315	330	370	355	350	390	340	325	270	280	390	400	300	260	230	304
22	250	240	270	285	240	250	270	280	300	300	300	360	350	350	330	300	320	265	280	340	350	330	270	240	295
23	230	220	240	230	240	260	270	260	300	315	320	350	360	330	320	300	225	250	300	325	280	270	270	240	279
24	225	230	250	250	250	250	280	260	300	300	360	330	330	330	325	330	320	270	270	330	300	280	250	230	285
25	240	220	250	245	240	270	270	260	300	310	330	350	350	335	320	340	315	270	290	400	450	350	270	230	300
26	210	230	250	225	250	270	270	290	300	320	340	350	360	350	370	320	320	260	280	330	290	295	225	235	289
27	220	220	230	250	260	250	280	260	300	300	350	360	360	360	360	330	340	290	280	370	420	300	240	220	298
28	210	225	250	250	280	q275b	270	250	300	310	350	350	350	310	340	320	320	260	290	320	330	310	250	245	290
29	240	250	240	260	260	250	260	270	290	310	340	330	340	340	320	320	210	280	280	270	270	250	230	240	277
30	260	260	270	250	250	300	270	260	300	290	320	330	360	330	330	310	320	270	300	320	260	260	240	250	288
31	260	290	330	350	320	320	290	240	290	300	320	350	360	340	330	300	240	260	300	380	360	270	240	230	303
MEAN*	238	239	258	265	280	296	273	260	292	306	332	346	352	340	337	320	304	265	279	337	342	294	257	237	294

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY. k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 157

MARCH 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1941

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.5	4.8	5.2	4.9	5.5	p5.5b	5.4	4.8	4.8	...	...
2	...	...	4.9	4.8	5.0	5.0	5.0	4.9	4.9	4.9	4.8	...	...
3	...	...	4.9	4.9	5.0	5.0	5.0	5.0	4.9	4.8	4.8	...	...
4	...	4.3	4.8	4.9	5.0	5.1	4.9	p5.0c	p5.0c	p4.9c	p4.8c	...	...
5	...	...c	4.8	4.9	4.9	4.9	5.0	4.9	5.0	4.7	4.7	...	...
6	...	...	4.7	4.9	5.0	p5.0c	p5.1c	p5.1c	p5.0c	p4.9c	4.9	...	...
7	...	...	4.9	4.9	5.0	4.9	5.0	5.0	4.9	5.0	5.0	...	...
8	...	...	4.9	5.0	4.9	5.1	5.0	4.9	5.0	4.7	4.7	...	...
9	...	...	4.5	4.8	5.0	4.8	4.9	4.8	4.8	4.8	4.5	4.5	...
10	...	...	4.6	4.9	4.9	5.0	4.9	4.8	4.8	4.7	4.4	...	...
11	...	...	4.6	4.9	4.9	4.9	4.9	4.9	4.8	4.7	4.7	...	...
12	...	4.5	4.5	4.8	4.9	4.9	5.0	4.9	4.9	5.0	4.6	...	...
13	...	...	4.7	5.0	4.9	4.9	4.8	5.0	4.9	4.6	4.5	...	...
14	...	...	4.7	4.8	4.8	5.0	4.9	4.8	4.6	4.7	4.7	...	...
15	...	...	4.9	4.8	4.9	4.9	4.8	4.8	5.0	4.6	4.8	...	...
16	...	...	4.6	4.9	4.9	4.9	5.0	5.0	4.9	5.0	4.8	4.7	...
17	...	4.3	4.8	4.8	4.9	4.9	4.9	4.9	4.8	4.8	4.7	...	...
18	...	4.4	4.7	4.9	4.9	5.0	5.0	5.0	5.0	4.8	4.7	...	...
19	...	...	4.6	5.0	5.0	5.0	5.0	4.8	4.8	4.8	p4.7c	...	...
20	...	4.6	4.8	4.8	4.8	4.9	4.9	4.8	4.7	4.9	4.7	...	...
21	...	4.7	4.9	5.0	4.9	5.1	4.9	4.9	5.0	4.9	4.8	...	...
22	...	4.2	4.6	4.8	4.9	5.0	5.1	5.0	5.3	4.8	4.7	...	...
23	...	...	4.8	4.8	4.9	5.1	5.1	4.9	4.8	4.6	...	...	...
24	...	...	4.8	5.0	5.2	4.9	4.9	4.8	4.9	4.6	4.6	...	...
25	...	...	4.8	5.0	5.1	5.2	5.0	5.0	4.9	4.7	4.8	...	...
26	...	4.7	4.8	4.8	5.0	5.0	5.1	5.1	5.1	4.8	4.7	...	...
27	...	...	4.7	4.9	5.0	5.0	5.0	4.9	5.0	4.8	4.2	...	...
28	...	...	4.8	4.7	5.1	4.9	5.0	4.8	4.9	4.8	4.7	...	...
29	...	...	4.4	4.9	5.0	4.9	4.9	5.0	5.2	4.7	...	...	...
30	...	...	4.6	4.8	5.1	5.0	5.0	5.1	4.9	4.7	4.7	...	...
31	...	...	4.8	4.6	4.8	5.0	5.0	4.8	4.8	4.7	...	...	...
* MEAN	...	4.5	4.7	4.9	5.0	5.0	5.0	4.9	4.9	4.8	4.7	4.6	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	250	240	240	235	290	p275b	265	p250b	240	...	....
2	...	...	230	240	240	230	230	230	220	230	220	...	...
3	...	...	220	240	220	230	230	220	220	230	220	...	...
4	...	240	220	230	230	225	220	...c	...c	...c	...c	...	...
5	...	...c	p225c	p220c	220	240	230	230	220	220	230	...	...
6	...	...	230	230	230	...c	...c	...c	...c	...c	210	...	...
7	...	...	230	220	230	220	225	210	220	220	220	...	...
8	...	...	240	230	225	230	220	210	220	210	220	...	...
9	...	...	240	230	230	220	220	210	220	230	220	240	...
10	...	...	230	240	230	210	210	210	200	200	230	...	...
11	...	...	230	230	230	225	230	220	220	230	210	...	....
12	...	245	230	225	220	210	220	220	210	220	230	...	...
13	...	...	240	210	230	230	230	220	200	210	230	...	...
14	...	...	240	240	240	225	220	200	220	230	230	...	...
15	...	...	240	230	210	210	230	220	240	210	230	...	...
16	...	...	230	230	225	225	220	200	205	210	200	260	...
17	...	250	220	220	220	220	200	220	200	210	210	...	...
18	...	240	240	200	230	210	210	220	210	200	200	...	...
19	...	...	240	240	220	220	210	200	220	220	p210c	...	...
20	...	240	240	230	230	220	220	210	220	210	220	...	...
21	...	250	240	240	230	210	215	220	220	225	235	...	...
22	...	260	230	230	215	210	220	220	210	220	250	...	...
23	...	...	240	230	220	230	220	220	220	220	...	...	...
24	...	...	240	240	240	230	220	220	220	220	210	...	...
25	...	...	230	230	210	210	210	220	210	230	235	...	...
26	...	250	230	230	230	220	215	210	220	220	220	...	...
27	...	...	240	230	220	220	220	210	210	220	220	...	...
28	...	...	230	230	220	230	220	210	220	210	220	...	...
29	...	...	250	245	230	220	220	210	200	220	...	...	...
30	...	...	250	230	230	220	220	220	220	220	230	...	...
31	...	...	250	250	240	240	230	230	230	220	...	...	...
* MEAN	...	247	235	231	227	222	223	218	218	219	222	250	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 158

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1941 MARCH 1941

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.9	1.0	1.2	2.0	1.9	...b	...b	...b	...b	1.1	1.1	1.1
2	0.6	1.1	1.1	1.1	1.2	2.0	2.0	2.0	2.0	1.9	1.7	1.1	1.0
3	0.6	0.8	1.0	1.2	1.9	1.9	1.9	1.9	1.9	1.9	1.2	1.1	0.8
4	0.6	1.1	1.1	1.1	1.4	1.4	2.0	...c	...c	...c	...c	...c	...c
5	...c	...c	...c	...c	1.2	1.8	1.9	1.9	1.8	1.2	1.2	1.0	0.9
6	0.6	1.0	1.2	1.9	1.8	...c	...c	...c	...c	...c	2.0	1.1	0.9
7	0.7	1.0	1.0	1.1	1.1	1.8	1.8	1.8	1.4	1.2	1.1	1.2	0.9
8	0.6	0.6	1.0	1.2	1.2	1.2	2.0	1.9	1.8	1.2	1.1	1.0	0.8
9	0.9	0.9	1.1	1.2	1.3	1.8	1.8	1.8	1.7	1.3	1.1	1.0	0.9
10	0.9	1.0	1.2	1.1	1.9	1.9	1.9	1.9	1.9	1.8	1.2	1.1	0.9
11	0.7	1.0	1.1	1.3	1.8	1.9	1.8	1.8	1.8	1.3	1.1	1.0	0.9
12	0.9	0.9	1.0	1.3	1.2	1.8	1.8	1.8	1.8	1.7	1.3	1.0	0.9
13	0.9	1.0	1.1	1.2	1.3	1.8	1.8	1.8	1.8	1.2	1.1	1.0	0.9
14	1.0	1.0	1.1	1.2	1.8	1.8	1.8	1.8	1.8	1.4	1.2	1.1	0.9
15	0.9	1.0	1.2	1.8	1.8	2.0	1.8	1.8	1.8	1.4	1.2	1.0	1.0
16	0.9	1.0	1.2	1.3	1.8	1.8	1.8	1.8	1.4	1.3	1.2	1.0	1.0
17	1.0	1.0	1.1	1.8	1.8	1.9	1.9	2.0	2.0	1.8	1.6	1.1	1.2
18	1.0	1.0	1.1	1.3	1.4	1.8	1.8	1.9	1.8	1.0	1.2	1.0	0.7
19	0.9	1.0	1.0	1.8	1.9	1.9	1.8	2.0	1.8	1.7	p1.4c	1.0	p0.8c
20	0.9	1.0	1.1	1.3	1.8	1.8	1.8	1.8	1.8	1.3	1.2	1.0	1.0
21	0.9	1.0	1.2	1.3	1.8	1.8	2.0	1.8	1.8	1.4	1.2	1.0	0.8
22	0.8	0.9	1.1	1.2	1.4	1.8	1.8	2.2	1.8	1.7	1.1	1.0	0.8
23	0.8	1.0	1.2	1.8	1.9	1.8	1.8	1.8	1.4	1.2	1.2	0.9	0.6
24	0.9	0.9	1.2	1.4	1.8	1.8	1.8	1.8	1.4	1.2	1.2	1.0	0.8
25	0.8	0.9	1.2	1.9	1.8	1.8	1.7	1.8	1.4	1.3	1.2	1.0	0.8
26	0.8	0.8	1.1	1.2	1.8	1.7	1.8	1.8	1.8	1.3	1.2	1.0	0.8
27	0.9	0.9	1.1	1.2	1.8	1.7	1.8	1.8	1.4	1.2	1.0	0.8	0.6
28	0.8	1.0	1.0	1.2	1.8	1.8	1.8	1.8	1.4	1.2	1.1	1.0	0.8
29	0.9	1.0	1.0	1.2	1.2	1.8	1.7	1.6	1.2	1.2	1.2	0.8	1.0
30	0.6	0.9	1.0	1.3	1.8	1.8	1.8	1.4	1.8	1.2	1.2	1.0	0.9
31	0.9	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.2	1.1	1.0	1.0	0.8
* MEAN	0.8	1.0	1.1	1.4	1.6	1.8	1.8	1.8	1.7	1.4	1.2	1.0	0.9

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.4	2.4	2.9	3.9	4.0	4.1	p4.0b	p4.1b	p4.0b	p3.9b	3.0	2.4	1.8
2	1.5	2.4	3.0	4.0	4.1	4.3	4.2	4.3	4.2	4.0	3.0	2.4	1.6
3	1.8	2.4	3.0	3.9	4.0	4.1	4.1	4.2	4.0	3.8	3.0	2.5	1.6
4	1.4	2.5	3.0	3.5	3.9	4.1	4.3	...c	...c	...c	...c	...c	...c
5	...c	...c	...c	...c	...c	4.2	4.3	4.0	4.0	3.9	3.0	2.4	1.5
6	1.6	2.2	3.0	4.3	4.0	...c	...c	...c	...c	...c	4.3	2.0	1.6
7	1.4	2.4	3.0	3.4	3.9	4.0	4.2	4.1	4.1	3.9	3.8	2.2	1.6
8	1.8	2.4	2.7	3.6	3.8	4.0	4.2	4.2	4.2	3.7	3.0	2.0	1.5
9	1.6	2.4	3.0	3.4	3.9	3.8	4.0	4.0	4.0	3.7	2.8	2.4	1.5
10	1.4	2.1	3.1	3.5	3.9	4.0	4.0	4.1	3.6	3.8	2.9	2.4	0.8
11	1.6	2.4	2.9	3.7	4.0	4.0	4.2	4.1	3.8	3.1	2.8	2.4	1.4
12	1.5	2.4	2.5	3.4	3.8	4.1	4.1	4.1	3.9	3.6	2.9	2.4	1.5
13	1.4	2.4	2.8	3.8	4.0	4.1	4.1	4.0	4.0	3.1	2.9	2.4	1.4
14	1.4	2.1	2.9	3.4	3.8	4.0	4.0	4.0	4.0	3.4	2.2	4.0	1.6
15	1.4	2.4	2.8	3.9	4.0	4.1	4.2	4.1	4.1	3.4	2.8	2.1	1.5
16	1.6	2.4	2.8	3.4	4.0	4.2	4.3	4.1	4.0	3.5	3.0	2.7	1.8
17	1.4	2.4	2.8	3.3	4.0	4.1	4.2	4.0	4.0	3.8	2.9	2.4	1.5
18	1.5	2.5	3.0	3.6	3.7	4.0	4.1	4.0	3.9	3.2	2.8	2.6	1.7
19	1.7	2.4	3.0	3.7	3.8	4.1	4.0	4.0	4.0	3.4	p2.6c	2.3	p1.6c
20	1.6	2.5	3.0	3.4	4.0	4.0	4.0	4.0	4.0	3.4	2.8	2.4	1.4
21	1.5	2.4	2.8	3.4	3.7	4.0	4.0	4.0	3.8	3.1	2.5	2.5	1.3
22	1.6	2.4	2.8	3.4	3.8	3.8	4.0	4.0	3.7	3.5	3.2	2.6	1.4
23	1.6	2.4	2.7	3.5	3.8	3.9	3.9	4.0	3.6	3.4	2.8	2.4	1.4
24	1.6	2.4	3.1	3.4	3.9	4.0	4.0	4.0	3.8	3.4	3.0	2.3	1.4
25	1.6	2.5	3.0	3.5	3.7	3.9	3.9	4.0	3.8	3.0	2.3	2.3	1.3
26	1.5	2.5	2.8	3.4	3.6	3.9	4.0	3.9	3.8	2.8	2.5	2.5	1.4
27	1.4	2.4	2.8	3.4	3.6	3.8	4.0	3.9	3.6	3.3	2.5	2.2	1.2
28	1.6	2.6	2.8	3.3	3.7	3.9	4.0	4.0	3.6	3.1	2.9	2.4	1.9
29	1.5	2.4	2.8	3.3	3.5	3.8	3.9	3.6	3.6	3.1	2.0	2.4	1.4
30	1.5	2.4	2.8	3.4	3.2	3.9	4.0	3.8	3.6	2.9	2.7	2.2	1.3
31	1.5	2.5	2.8	3.2	3.5	3.7	3.7	3.8	3.6	2.8	2.1	2.3	1.2
* MEAN	1.5	2.4	2.9	3.5	3.8	4.0	4.1	4.0	3.9	3.4	2.8	2.4	1.5

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1941 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — APRIL 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	11.0	8.4	6.5	5.2	4.2	2.8	4.7	7.9	10.2	10.2	8.9	8.2	8.4	8.9	9.0	9.1	9.6	10.2	10.0	9.3	9.6	10.7	10.4	10.3	8.5
2	10.3	9.4	5.8	4.3	3.6	3.2	4.9	8.2	9.6	10.9	11.0	10.3	10.0	9.7	9.5	9.3	9.2	9.4	9.6	9.4	9.9	10.0	8.9	8.3	8.5
3	8.7	10.0	7.4	5.4	4.8	4.0	4.9	8.2	10.0	11.0	10.4	8.4	9.5	10.3	p10.2c	p10.0c	p9.9c	9.7	9.6	9.4	8.6	9.0	9.9	10.8	8.8
4	10.9	10.2	7.8	6.0	5.2	4.0	4.6	7.8	9.8	...c	...c	...c	...c	...c	...c	...c	9.6	9.2	9.4	8.4	8.0	10.1	9.3	8.3	...
5	7.2	6.9	4.7	4.5	4.3	4.2	5.0	7.8	9.6	9.6	8.8	p8.6c	8.4	8.8	9.1	9.1	9.4	9.1	8.8	8.3	8.2	8.4	7.6	7.2	7.6
6	7.0	6.5	4.8	4.4	4.4	p4.5f	5.5	8.2	10.0	10.3	10.3	9.2	9.1	9.2	9.2	9.2	8.9	8.9	9.2	8.2	p8.5f	8.8	8.8	7.3	7.9
7	6.7	6.8	5.9	5.1	4.5	4.0	4.4	7.6	9.1	10.2	10.8	10.3	9.4	8.9	9.1	9.0	8.7	8.4	8.1	7.8	7.7	8.4	8.4	7.4	7.8
8	7.4	9.3	9.4	6.8	5.6	5.4	6.4	8.8	10.2	10.5	11.2	10.3	9.8	10.4	11.1	11.2	11.5	10.4	9.4	6.8	6.9	7.1	7.0	6.3	8.7
9	6.4	6.8	6.0	5.8	5.2	4.8	5.6	7.6	8.6	8.2	8.8	9.0	9.3	10.4	11.1	11.2	11.2	11.1	10.0	8.8	8.4	9.0	9.0	9.2	8.4
10	9.2	10.1	8.2	5.1	4.2	4.4	5.6	7.6	8.5	8.1	8.3	7.3	8.1	9.0	10.0	11.5	11.0	10.3	8.4	7.0	8.8	9.6	9.4	8.4	8.3
11	7.5	7.3	5.5	4.5	3.6	3.6	3.8	7.2	7.9	8.1	8.2	8.3	9.0	9.7	10.4	11.4	11.2	11.4	10.4	9.4	9.2	9.4	8.9	8.5	8.1
12	7.0	7.9	6.4	5.4	4.4	3.7	4.3	7.9	9.4	9.2	8.3	8.0	8.2	9.2	10.2	11.0	11.2	11.0	10.7	9.2	9.1	10.0	p9.1f	8.2	8.4
13	8.0	6.9	5.2	4.0	2.6	1.5	4.1	7.6	9.0	8.0	7.6	7.3	7.8	8.3	9.4	10.1	10.2	10.8	10.6	9.4	8.9	8.7	8.9	8.2	7.7
14	p7.7f	7.2	5.2	4.6	3.2	2.3	4.2	7.7	9.6	9.6	8.1	7.7	8.0	8.9	10.0	10.2	10.5	10.6	10.0	9.0	9.0	9.4	9.2	7.8	7.9
15	7.4	7.2	4.9	3.8	2.7	1.5	4.0	7.2	8.8	9.9	9.0	7.4	7.5	8.4	9.3	9.9	9.8	10.0	10.0	9.4	9.4	9.1	8.8	7.6	7.6
16	7.4	5.7	3.9	2.8	2.4	1.6	4.0	7.0	8.9	9.7	9.9	8.1	7.5	7.9	8.8	9.0	9.4	9.8	10.0	9.0	9.2	8.8	8.4	8.0	7.4
17	9.0	9.0	8.6	5.5	4.2	3.5	4.6	7.6	9.2	10.4	9.7	8.4	8.4	8.7	9.8	9.7	10.0	10.2	9.6	8.5	6.6	p7.3f	8.0	8.4	8.1
18	8.6	7.2	5.0	3.4	2.4	2.2	4.2	7.8	9.5	10.4	11.0	10.5	9.6	9.4	9.6	9.1	9.2	9.3	9.2	9.3	10.6	9.8	10.0	8.4	8.2
19	8.7	6.4	4.0	3.9	3.6	2.6	3.9	7.8	9.3	11.0	11.3	10.8	11.2	11.9	12.0	11.9	11.6	11.2	10.0	9.0	8.4	8.7	8.2	6.2	8.5
20	7.4	7.2	6.6	4.4	3.0	p2.8f	4.3	7.4	8.6	8.9	9.0	8.9	9.0	9.5	10.1	10.0	10.0	10.0	10.0	9.0	8.8	9.0	8.8	7.1	7.9
21	6.1	5.0	4.1	4.0	3.6	3.2	4.4	7.6	9.4	...c	...c	...c	...c	...c	...c	...c	9.9	9.5	8.4	6.8	6.0	7.0	6.6	6.8	...
22	6.8	6.0	5.4	4.3	4.6	4.4	4.9	p7.6c	p8.1c	8.6	8.0	7.6	7.9	8.4	9.2	10.0	9.4	8.8	8.0	6.7	6.5	p6.2f	5.8	p5.8f	7.0
23	6.4	6.5	6.6	4.4	3.5	2.6	4.0	7.3	9.3	10.2	9.6	8.2	8.0	8.2	9.2	9.0	9.6	9.4	8.9	7.6	7.4	8.1	8.0	6.7	7.5
24	6.6	6.7	6.4	4.5	2.5	p3.2b	3.9	7.6	9.2	7.6	8.0	p8.4c	p8.7c	9.1	9.0	9.5	9.6	9.9	10.6	10.2	9.9	9.8	9.6	10.1	7.9
25	10.7	8.4	6.8	6.6	6.2	5.8	p6.2f	8.2	11.0	12.0	11.8	10.3	8.9	9.3	9.4	9.3	9.2	9.1	8.5	7.4	7.7	8.2	7.8	7.5	8.6
26	6.2	5.5	4.6	4.7	4.0	3.3	4.6	7.6	9.6	10.1	10.0	9.8	9.2	8.8	9.5	10.7	9.8	9.8	8.9	8.1	8.3	8.0	7.6	7.6	7.8
27	7.0	7.0	5.2	3.6	2.2	1.6	3.8	7.2	8.8	9.0	8.4	7.9	7.4	7.7	8.2	9.0	9.4	9.0	9.2	8.8	8.8	9.0	8.4	8.4	7.3
28	7.6	7.6	7.4	5.8	4.0	2.7	4.1	7.0	8.0	9.2	10.1	9.0	7.3	7.9	8.3	8.9	9.3	9.4	9.4	9.4	9.0	7.8	7.8	8.1	7.7
29	7.8	6.0	5.0	4.4	4.0	3.4	4.8	7.0	8.3	9.3	9.4	8.8	8.1	8.0	8.4	8.7	9.6	9.9	9.0	8.0	7.8	7.3	6.6	6.4	7.3
30	6.6	6.5	6.2	4.0	2.7	2.0	4.0	7.2	8.6	9.0	8.7	8.2	7.8	7.6	8.3	9.0	9.8	9.7	10.0	8.4	8.2	7.6	9.2	8.0	7.4
31																									
MEAN*	7.9	7.4	6.0	4.7	3.8	3.3	4.6	7.6	9.2	9.6	9.4	8.8	8.6	9.0	9.5	9.9	9.9	9.8	9.5	8.5	8.4	8.7	8.5	7.9	7.9

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 160

APRIL 1941 APRIL 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	230	230	260	250	270	260	250	290	320	330	380	350	340	330	300	300	270	290	310	320	240	230	250	284
2	230	220	220	250	260	[illegible]	270	260	300	300	320	320	330	320	330	320	320	260	270	295	270	240	250	260	279
3	250	250	240	270	275	260	280	260	300	320	320	370	330	340	q350c	q340c	q330c	260	280	320	320	320	260	220	294
4	220	260	245	270	250	260	270	250	300	...c	...c	...c	...c	...c	...c	...c	210	250	290	390	340	280	240	240	...
5	240	230	270	270	270	290	280	250	280	320	330	q370c	390	360	360	330	350	280	290	360	340	260	220	240	299
6	220	220	240	280	270	280	280	270	290	320	330	360	370	370	360	330	340	275	290	340	350	260	230	220	296
7	270	240	240	260	260	240	270	250	290	300	325	340	380	370	340	330	310	270	290	370	310	260	240	240	291
8	250	230	220	240	275	290	280	250	290	310	330	375	380	350	320	315	220	275	310	330	220	260	240	300	286
9	260	220	260	250	260	250	290	260	310	[illegible]	335	335	360	350	310	320	225	260	300	300	290	280	240	260	286
10	250	230	220	230	260	280	280	260	300	350	350	360	350	350	320	320	235	275	305	330	290	230	240	240	286
11	240	240	230	240	265	325	290	260	300	320	340	350	355	330	330	310	250	270	290	300	280	260	240	260	286
12	250	250	240	260	240	250	290	260	300	330	350	350	375	340	330	320	250	270	300	360	350	335	290	270	298
13	230	230	230	240	250	280	280	260	300	325	370	365	340	350	340	320	240	260	300	380	400	270	250	240	294
14	230	230	240	240	240	260	280	260	300	330	340	370	370	340	330	310	310	270	310	340	335	290	240	240	292
15	230	220	230	250	250	260	270	250	290	330	350	380	400	380	335	320	255	270	280	310	290	260	230	220	286
16	240	230	240	260	265	270	270	250	290	320	340	350	390	385	330	290	235	260	290	330	295	260	230	245	286
17	250	240	220	250	260	260	260	270	280	310	370	360	370	350	320	300	300	280	300	390	430	390	260	240	303
18	230	220	230	250	270	260	270	270	300	325	340	365	360	350	315	330	350	270	300	280	260	250	240	230	286
19	230	220	290	300	300	470	290	290	290	300	325	350	370	350	330	325	265	270	310	370	355	310	270	280	311
20	250	240	220	250	280	305	300	290	300	330	340	370	360	335	320	320	335	270	300	345	300	220	220	230	293
21	240	230	260	260	260	270	290	270	290	...c	...c	...c	...c	...c	...c	...c	330	320	300	430	q350a	280	270	230	...
22	230	240	230	250	250	250	300	q280c	q310c	335	350	340	380	360	335	325	235	280	310	370	400	330	240	240	299
23	230	230	240	250	240	260	280	260	295	310	350	380	380	380	340	325	230	270	300	340	320	340	240	240	293
24	240	230	230	240	240	q250b	260	260	300	370	325	q335c	q340c	345	350	300	250	280	280	280	300	275	270	250	283
25	230	250	290	310	340	300	290	260	290	310	350	360	360	340	330	350	300	300	320	400	335	250	240	240	306
26	240	240	260	260	270	270	280	260	295	300	335	350	330	350	330	320	250	275	310	360	340	290	270	240	293
27	250	230	230	230	260	270	280	250	300	330	360	390	370	375	340	320	290	280	280	330	310	270	250	230	293
28	255	250	250	240	240	250	270	250	270	335	370	420	390	390	365	340	250	290	290	290	340	325	270	250	300
29	240	270	260	260	290	325	290	270	310	330	335	385	350	370	380	340	300	280	310	340	325	330	250	250	308
30	230	230	240	250	260	270	300	260	300	330	380	380	380	365	370	330	300	260	310	380	300	280	250	230	299
31																									
MEAN*	239	235	241	256	263	278	280	261	295	323	343	363	365	355	337	322	279	273	297	342	322	281	247	244	293

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 161

APRIL 1941 — APRIL 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.7	4.8	4.9	5.1	5.0	4.9	4.8	4.5	4.5	...	...
2	...	...	4.6	4.8	5.0	5.0	4.9	4.9	4.8	4.7	4.8	...	...
3	...	...	4.7	4.8	4.8	5.1	4.9	4.8	p4.7c	p4.6	p4.6	...	...
4	...	...	4.7	...c	...c	...c	...c	...c	...c	...c	...	...	...
5	...	...	4.7	4.8	4.9	p5.0c	4.9	4.8	4.9	4.8	4.8	...	...
6	...	4.5	4.8	4.8	4.9	4.9	5.0	5.0	4.8	4.8	4.8	...	...
7	...	...	4.8	4.9	4.9	4.8	4.9	4.9	4.8	4.7	4.5	...	...
8	...	...	4.5	4.8	4.9	5.0	5.0	4.8	4.7	4.6	...	...	...
9	...	...	4.7	4.9	5.0	4.9	5.0	4.9	4.9	4.8	...	...	...
10	...	...	4.6	4.8	4.8	4.8	4.8	4.9	4.9	4.9	...	...	...
11	...	...	4.8	4.9	4.9	5.0	4.9	4.9	5.0	4.9	...	...	...
12	...	...	4.8	5.0	5.0	4.8	5.0	4.9	4.9	5.0	...	...	...
13	...	...	4.7	4.9	4.9	4.9	4.8	4.8	4.8	4.7	...	...	...
14	...	...	4.6	4.9	4.8	4.7	4.8	4.8	4.9	4.8	4.5	...	...
15	...	...	4.6	4.9	4.9	4.9	5.0	5.0	4.7	4.8	...	...	...
16	...	...	4.8	4.8	4.9	4.8	4.9	4.9	4.8	4.3	...	...	...
17	...	4.3	4.7	4.9	4.9	4.9	4.8	4.8	4.6	4.7	4.4	...	...
18	...	...	4.8	4.8	4.9	5.0	4.9	4.6	4.6	4.5	4.6	...	...
19	...	4.3	4.7	4.9	5.0	4.9	4.9	5.0	4.9	4.8	...	...	...
20	...	4.4	4.8	4.9	4.9	4.8	4.9	4.8	4.8	4.7	4.5	...	...
21	...	...	4.8	...c	...c	...c	...c	...c	...c	...c	4.6	...	...
22	...	...	p4.8c	4.9	4.8	4.8	4.8	4.8	4.7	4.6	...	...	...
23	...	...	4.8	4.9	4.8	4.8	4.8	4.8	4.5	4.5	...	...	...
24	...	...	4.8	4.9	5.0	p5.1c	p5.0c	5.0	5.0	4.5	...	...	...
25	...	...	4.8	4.9	4.9	4.8	4.8	4.8	4.8	4.7	4.5	...	...
26	...	...	4.7	4.9	4.9	4.9	4.8	4.7	4.8	4.5	...	...	...
27	...	...	4.8	4.8	5.0	4.7	4.8	4.6	4.5	4.5	4.5	...	...
28	...	...	4.5	4.7	4.8	4.8	4.8	4.9	4.8	4.5	...	...	...
29	...	...	4.8	4.8	4.6	4.8	4.7	4.6	4.8	4.5	4.5	...	...
30	...	...	4.5	4.8	4.7	4.8	4.7	4.7	4.5	4.6	4.3	...	...
31													
MEAN*	...	4.4	4.7	4.8	4.9	4.9	4.9	4.8	4.8	4.7	4.6	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	250	230	230	220	220	220	220	210	200	...	...
2	...	...	240	230	230	220	220	210	210	220	220	...	...
3	...	...	240	230	220	p220b	220	230	p230c	p240c	p240c	...	...
4	...	...	240	...c	...c	...c	...c	...c	...c	...c	...	...	...
5	...	...	220	230	220	p220c	220	225	230	225	230	...	...
6	...	250	230	230	230	230	235	220	230	210	230	...	...
7	...	...	240	230	230	235	230	230	220	210	230	...	...
8	...	...	240	240	240	220	210	230	230	220	...	...	...
9	...	...	240	230	230	230	230	230	220	220	...	...	...
10	...	...	240	230	230	230	220	220	200	220	...	...	...
11	...	...	250	240	230	220	230	230	220	220	...	...	...
12	...	...	250	240	230	220	220	230	220	220	...	...	...
13	...	...	240	230	230	225	220	215	210	200	...	...	...
14	...	...	230	220	230	220	220	220	230	210	240	...	...
15	...	...	240	240	220	220	220	220	200	200	...	...	...
16	...	...	240	240	240	240	230	220	220	200	...	...	...
17	...	250	230	250	220	220	220	220	230	220	250	...	...
18	...	...	240	220	245	230	240	220	245	250	220	...	...
19	...	265	250	250	220	220	250	p240b	230	230	...	...	...
20	...	270	235	250	230	230	240	220	220	210	230	...	...
21	...	...	240	...c	...c	...c	...c	...c	...c	...c	240	...	...
22	...	...	p250c	240	220	230	220	220	230	230	...	...	...
23	...	...	250	240	230	220	230	230	220	220	...	...	...
24	...	...	250	240	230	p225c	p220c	220	250	240	...	...	...
25	...	...	260	240	245	240	230	240	240	210	250	...	...
26	...	...	260	250	240	235	230	230	230	220	...	...	...
27	...	...	240	235	250	240	230	250	240	220	260	...	...
28	...	...	250	250	250	230	250	240	230	210	...	...	...
29	...	...	260	240	240	240	230	250	230	220	250	...	...
30	...	...	250	250	240	240	210	225	210	220	230	...	...
31													
MEAN*	...	259	243	237	232	228	227	227	225	219	235	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 162

APRIL 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1941

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	0.9	1.0	1.2	1.3	1.4	1.3	1.2	1.2	1.2	1.1	1.0	0.6	1.6	2.4	2.6	3.2	3.2	3.8	3.9	3.8	3.5	3.0	2.7	2.3	1.2
2	0.8	0.9	1.1	1.3	1.[illegible]	1.8	1.8	1.2	1.2	1.1	1.1	1.0	0.6	1.4	2.4	2.9	3.3	3.5	3.6	3.8	3.7	3.4	3.1	2.7	2.4	1.2
3	0.7	0.8	0.9	1.2	1.2	p1.2b	1.2	1.3	p1.2c	p1.2c	p1.2c	1.1	1.0	1.4	2.2	3.0	3.3	3.5	p3.6b	3.7	3.6	p3.3c	p3.0c	p2.7c	2.4	1.2
4	0.8	1.1	1.1	...c	...c	...c	...c	...c	...c	...c	1.1	1.0	0.8	1.4	2.4	3.0	...c	...c	...c	...c	...c	...c	...c	2.8	2.3	1.2
5	0.6	0.8	1.0	1.2	1.4	p1.4c	1.4	1.4	1.2	1.2	1.1	1.0	0.6	1.3	2.4	2.7	3.3	3.6	p3.7c	3.8	3.8	3.4	3.0	2.6	2.3	1.1
6	0.6	0.6	1.0	1.1	1.1	1.9	1.3	1.1	1.2	1.1	1.1	1.0	0.6	0.6	2.3	3.1	3.3	3.5	3.8	3.9	3.7	3.5	3.1	3.7	2.3	1.2
7	0.7	0.8	1.0	1.0	1.2	1.7	1.7	1.4	1.3	1.2	1.1	0.9	0.8	1.4	2.4	2.8	3.3	3.7	3.9	3.9	3.8	3.5	3.1	2.8	2.3	1.2
8	0.6	0.8	1.0	1.1	1.2	1.0	1.3	1.4	1.2	1.2	1.2	1.0	0.7	1.4	2.5	2.6	3.2	3.8	3.8	4.0	4.0	3.5	3.0	2.7	2.2	1.0
9	0.6	0.8	1.0	1.0	1.0	1.2	1.4	1.8	1.8	1.2	1.1	0.9	0.7	1.4	2.4	2.6	3.2	3.7	3.7	3.8	3.6	3.5	3.1	2.8	2.2	1.1
10	1.1	0.8	1.1	1.1	1.2	1.2	1.2	1.2	1.1	1.3	1.0	0.9	0.7	1.4	2.4	2.6	3.5	3.8	3.8	3.8	3.0	3.5	3.1	3.7	2.2	1.2
11	0.7	0.7	1.0	1.2	1.1	1.2	1.1	1.8	1.2	1.0	1.0	1.0	0.6	1.4	2.3	2.8	3.3	3.7	3.6	3.8	4.0	3.4	3.0	2.8	2.2	1.0
12	0.6	0.8	1.0	1.2	1.3	1.1	1.3	1.2	1.2	1.2	1.2	1.0	0.6	1.2	2.3	2.6	2.9	3.0	3.7	3.9	3.9	3.7	3.0	2.3	2.2	1.0
13	0.7	0.7	1.1	1.0	1.2	1.1	1.3	1.3	1.1	1.1	1.0	0.9	0.6	1.4	2.4	2.5	3.2	3.7	3.7	3.9	3.9	3.8	3.1	2.3	2.2	1.1
14	0.6	0.6	1.0	1.1	1.1	1.2	1.8	1.3	1.2	1.2	1.0	1.0	0.7	1.4	2.3	2.9	3.1	3.7	4.0	3.8	3.8	3.8	2.9	2.0	2.2	1.1
15	0.8	0.8	1.0	1.1	1.1	1.9	1.8	1.9	1.8	1.2	1.2	1.0	0.6	1.3	2.4	2.8	3.4	3.5	4.0	4.0	4.0	4.0	3.1	2.8	2.3	1.0
16	0.8	0.8	1.0	1.2	1.2	1.3	1.9	1.2	1.2	1.2	1.2	1.0	0.8	1.4	2.2	2.7	3.8	3.7	4.1	4.2	3.9	3.9	3.1	2.9	2.1	1.4
17	0.8	0.9	1.1	1.2	1.8	1.8	1.9	1.8	1.4	1.2	1.2	1.0	0.8	1.4	2.5	3.0	2.4	4.0	4.0	4.0	4.0	3.9	3.5	3.0	2.2	1.2
18	0.8	0.8	1.1	1.1	2.0	2.0	2.0	1.8	1.8	1.2	1.2	1.0	0.6	1.5	2.4	3.1	3.8	4.0	4.0	4.1	4.1	4.0	3.9	2.8	2.2	1.1
19	0.7	0.8	1.0	1.3	1.3	2.0	2.0	p2.0b	2.0	1.3	1.3	1.0	0.7	1.4	2.4	2.9	3.7	4.0	4.0	4.0	p4.0b	4.0	3.2	2.8	2.1	1.0
20	0.6	0.8	1.1	1.3	1.8	2.0	1.9	2.0	1.9	1.3	1.0	1.0	0.8	1.1	2.2	2.7	3.5	3.8	4.1	4.1	4.0	3.9	3.0	2.8	2.2	1.0
21	0.7	0.8	1.0	...c	...c	...c	...c	...c	...c	...c	...c	1.0	0.7	1.4	2.4	3.0	...c	...c	...c	...c	...c	.. c	...c	3.0	2.1	1.2
22	0.6	p0.8c	p1.0c	1.1	1.2	1.8	1.3	1.8	1.8	1.2	1.[illegible]	1.0	0.6	1.4	p2.4c	p3.0c	3.8	3.7	4.0	4.0	3.9	3.8	3.0	3.6	2.2	0.9
23	0.6	0.8	1.1	1.1	1.3	1.4	1.8	1.9	1.2	1.2	1.1	1.0	0.8	1.3	2.4	2.9	3.2	3.7	4.0	4.0	4.0	3.8	3.0	2.8	2.0	1.0
24	0.9	0.8	1.0	1.2	1.3	p1.4c	p1.4c	1.4	1.2	1.2	1.1	1.0	0.8	1.4	2.3	2.9	3.0	3.8	p3.9c	p4.0c	4.0	4.0	3.0	2.7	2.0	1.0
25	0.6	0.7	0.8	1.1	1.2	1.9	1.8	1.8	1.3	1.2	1.0	0.8	0.6	1.4	2.3	2.8	3.2	3.6	4.0	4.0	4.0	3.9	3.0	2.7	2.0	0.9
26	0.6	0.8	1.0	1.1	1.1	1.1	1.2	1.3	1.2	1.1	1.0	1.0	0.8	1.4	2.4	3.0	3.9	4.0	4.0	3.9	3.8	3.8	3.0	2.8	2.2	0.9
27	0.7	0.8	0.9	1.2	1.4	1.9	1.8	1.3	1.3	1.2	1.0	1.0	0.7	1.4	2.4	2.8	3.3	3.9	3.8	3.9	3.9	3.8	2.8	2.2	2.1	1.0
28	0.9	0.9	1.1	1.2	1.2	1.9	1.8	1.3	1.2	1.1	1.0	0.9	0.7	1.4	2.3	2.8	3.2	3.9	3.9	4.0	4.0	3.9	3.0	[illegible].8	2.0	1.0
29	0.6	0.9	1.1	1.2	1.2	1.3	1.2	1.2	1.1	1.1	1.0	0.8	0.8	1.4	2.4	2.8	3.1	2.9	3.9	3.9	3.1	3.1	3.0	[illegible].8	2.0	1.0
30	0.6	0.8	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.2	1.1	0.9	0.8	1.4	2.3	2.8	2.9	3.2	3.9	3.9	3.8	3.8	3.0	2.2	2.2	1.2
31																										
MEAN*	0.7	0.8	1.0	1.1	1.3	1.5	1.5	1.5	1.4	1.2	1.1	1.0	0.7	1.4	2.4	2.8	3.3	3.6	3.9	3.9	3.8	3.7	3.1	2.8	2.2	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 163

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1941 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MAY 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.1	7.2	6.1	4.3	3.0	2.5	3.9	7.0	8.4	9.6	9.6	8.2	7.5	7.5	7.7	p8.2c	8.8	9.7	9.0	7.8	7.9	p8.2c	8.3	5.9	7.2
2	5.8	5.6	5.0	4.5	p4.4f	4.2	3.5	6.8	8.2	9.4	9.7	9.3	8.7	8.0	8.1	8.6	9.0	9.0	8.9	8.1	8.0	8.5	7.9	6.5	7.3
3	6.3	6.2	5.4	5.0	4.6	4.2	4.6	7.0	8.7	10.2	10.8	10.1	9.2	8.1	8.0	8.0	8.3	8.4	8.6	8.0	8.2	8.7	7.0	6.4	7.5
4	6.8	6.4	5.4	4.8	p5.4	5.5	3.5	6.6	9.1	10.6	9.8	9.2	8.2	8.0	8.3	9.0	9.0	9.0	8.3	7.5	7.2	7.6	7.2	6.8	7.5
5	6.9	5.7	4.4	3.8	3.6	3.7	4.5	7.2	8.6	9.0	8.3	7.3	7.2	7.3	7.9	8.2	8.3	8.3	7.9	6.8	5.9	p5.9f	6.6	5.8	6.6
6	4.6	3.7	3.4	3.4	3.0	2.8	3.8	6.5	7.8	9.0	9.3	8.8	8.0	7.5	8.0	8.4	9.0	p8.8c	8.7	8.2	7.5	6.5	5.7	6.8	6.6
7	8.0	6.9	6.5	6.1	5.5	5.3	6.1	7.9	9.2	10.4	9.7	8.3	7.9	7.3	7.3	7.9	8.2	8.2	8.1	7.7	6.5	6.3	6.0	6.2	7.4
8	6.1	5.7	5.3	3.7	4.4	3.5	3.4	6.7	7.9	9.0	8.0	7.1	6.9	7.3	7.8	8.7	9.2	9.5	9.6	8.8	9.0	8.1	7.6	6.5	7.0
9	6.3	6.6	6.2	5.8	5.4	4.9	5.3	6.6	8.2	8.4	8.0	7.6	7.5	7.8	8.1	8.4	8.7	8.8	8.6	8.3	8.3	8.3	8.4	7.1	7.4
10	5.8	4.8	3.2	2.5	2.2	2.1	3.8	6.8	7.9	8.4	8.0	7.6	7.4	7.3	7.6	8.2	8.8	8.4	7.6	8.2	8.5	9.0	7.7	5.7	6.6
11	4.7	4.0	3.5	2.9	2.2	1.5	3.5	6.8	8.6	8.6	6.8	6.6	6.8	6.9	7.1	8.0	9.0	8.5	7.8	7.6	8.4	7.5	7.9	6.8	6.3
12	5.9	4.8	5.0	3.9	3.1	2.9	4.1	6.6	8.0	7.9	6.7	6.4	6.2	6.6	...c	...c	...c	...c	...c	...c	...c	8.1	6.7	5.1	...
13	4.3	4.0	3.6	3.6	3.2	3.4	4.4	7.0	8.2	8.7	7.9	7.4	7.2	7.0	7.3	7.4	8.4	8.8	8.3	8.1	8.0	8.0	6.8	5.2	6.5
14	4.6	3.5	2.9	2.6	2.2	p2.4c	p4.4c	p6.3c	7.7	9.0	8.6	7.2	6.9	7.2	p7.4c	p7.7c	8.3	8.9	8.6	7.5	7.3	8.2	8.5	5.9	6.4
15	4.8	3.0	2.8	2.1	2.0	p1.8f	3.5	6.4	7.8	8.1	7.1	p7.3c	p7.0c	p7.1c	7.2	7.5	7.5	7.9	7.6	7.0	6.5	6.0	5.8	5.6	5.8
16	4.7	4.7	4.5	3.7	3.2	3.1	4.4	p5.9c	p7.4c	6.9	8.4	8.8	8.2	8.0	8.4	9.4	9.4	8.6	8.4	8.4	8.1	8.0	6.6	6.5	6.9
17	4.7	4.2	4.4	4.0	...c	...c	...c	...c	...c	9.3	9.8	9.0	8.4	7.9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
18	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
19	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.1	7.5	7.8	7.7	7.0	6.8	7.0	6.6	6.6	6.5	...
20	6.3	5.8	5.3	4.2	3.4	2.1	3.4	6.4	7.4	8.2	7.8	8.1	7.4	7.3	7.7	9.0	8.5	8.1	7.7	7.0	7.2	7.3	7.7	8.0	6.7
21	6.7	5.0	4.0	3.2	3.1	p4.4f	3.5	6.6	8.4	8.7	7.6	7.4	7.2	7.2	7.6	7.8	7.6	7.4	6.9	6.2	7.4	8.0	7.0	6.8	6.5
22	6.6	6.6	5.8	4.9	3.6	3.2	4.2	p6.4c	8.6	9.4	9.1	8.3	7.8	8.0	7.6	7.8	7.8	8.0	7.7	7.3	7.2	7.2	6.1	6.0	6.9
23	6.7	6.8	6.6	6.3	6.0	4.6	4.6	6.9	8.4	9.0	7.7	8.2	8.0	7.8	7.5	7.3	7.8	8.0	7.0	6.3	6.5	6.3	5.3	5.6	6.9
24	5.0	5.0	4.7	4.5	4.4	4.6	5.4	7.2	8.7	9.1	8.4	7.7	7.5	7.4	7.9	7.8	7.6	6.9	7.0	6.9	6.8	6.9	5.6	4.3	6.6
25	4.1	4.2	4.5	3.7	3.6	3.3	3.9	6.5	7.6	7.8	7.1	7.3	7.0	7.0	6.9	7.5	7.8	7.3	6.5	6.7	7.2	8.3	6.4	4.8	6.1
26	4.2	4.0	3.7	3.2	2.7	p3.0f	3.3	6.3	7.7	8.8	8.4	7.6	6.8	7.6	7.1	7.1	7.5	7.3	7.0	p6.3	6.9	5.9	5.4	3.8	5.9
27	3.5	3.6	3.8	3.1	p2.8f	p3.0f	3.1	6.5	8.0	8.3	8.6	8.5	8.0	7.9	7.5	7.1	7.2	7.3	7.3	6.9	6.9	7.3	6.6	5.2	6.2
28	4.6	5.0	5.0	4.5	4.0	p4.8f	p5.6f	6.4	7.5	7.9	7.3	7.0	7.3	7.4	7.4	7.9	7.6	7.6	7.6	6.9	6.8	7.1	6.8	4.8	6.4
29	4.3	3.1	2.8	2.7	p2.6f	p2.8f	3.2	6.3	7.9	8.4	8.1	8.5	8.3	7.8	7.3	7.3	6.9	7.0	6.5	5.8	5.5	4.7	4.4	4.5	5.7
30	4.7	4.2	3.6	2.8	2.4	2.1	2.9	5.9	7.6	8.1	8.2	8.0	8.3	8.3	8.0	8.6	9.0	8.2	7.6	6.9	7.7	6.6	5.5	p5.1f	6.3
31	5.4	p4.8f	p4.7f	p4.4f	p3.6f	p3.5f	3.2	5.9	7.3	7.9	7.7	7.3	7.7	7.6	7.5	8.7	8.4	8.0	8.2	7.8	7.5	7.5	7.0	6.0	6.6
MEAN*	5.5	5.0	4.6	3.9	3.6	3.4	4.0	6.6	8.1	8.8	8.4	7.9	7.6	7.5	7.6	8.0	8.3	8.2	7.8	7.4	7.4	7.4	6.7	5.9	6.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 164

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1941 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS MAY 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	240	240	230	240	260	280	280	250	290	330	370	400	430	410	380	q340c	300	280	310	300	280	q260b	240	240	299
2	270	260	300	320	330	340	290	260	330	340	350	370	390	380	390	380	330	260	290	330	300	280	240	240	315
3	260	255	240	320	280	250	270	260	310	320	335	360	390	380	390	370	350	270	310	350	300	250	260	240	305
4	230	240	230	300	q300	280	280	270	290	300	350	400	390	390	370	360	320	270	320	360	330	280	280	270	309
5	240	230	290	280	320	320	280	260	320	330	360	380	390	400	390	350	340	280	320	390	340	290	250	230	313
6	230	250	270	270	290	320	280	270	290	330	340	370	400	390	350	320	320	q310c	300	290	290	300	270	240	304
7	240	260	270	280	280	300	300	290	320	330	360	400	410	400	400	370	310	270	290	330	310	300	280	260	315
8	230	240	250	240	260	250	290	260	330	320	370	420	400	380	420	340	290	280	280	280	270	230	240	230	296
9	250	240	270	230	290	300	280	270	340	350	350	380	380	370	370	330	330	280	260	300	300	290	220	220	300
10	230	240	270	270	300	270	280	270	320	350	380	390	380	360	370	370	340	280	300	280	270	260	240	250	303
11	240	250	240	250	240	280	280	290	300	350	430	430	410	400	400	350	300	280	310	300	260	240	230	240	304
12	230	220	230	250	280	270	270	250	320	360	410	460	470	450	...c	...c	...c	...c	...c	...c	...c	240	220	240	...
13	240	250	280	290	300	280	290	270	330	320	390	410	390	370	400	370	320	250	300	290	250	220	230	220	303
14	240	270	260	240	250	q250c	q270c	q300c	320	350	370	370	400	430	q390c	q340c	300	280	310	340	320	240	220	220	303
15	240	270	260	290	330	320	280	250	310	340	400	q410c	q410c	q400c	390	360	250	270	300	360	320	290	290	230	315
16	240	240	240	260	270	270	270	q290c	q300c	320	320	350	390	400	370	340	320	270	280	290	230	230	220	220	291
17	220	230	250	250	...c	...c	...c	...c	...c	330	330	360	370	400	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
18	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
19	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	380	350	330	280	320	340	320	310	260	240	...
20	240	250	240	240	240	250	300	270	330	350	380	400	390	400	390	350	260	270	290	300	270	230	240	220	296
21	220	230	240	270	300	350	280	260	310	350	390	410	410	400	350	350	400	280	320	320	300	260	240	240	312
22	230	240	q240	q210	q220	q240	250	270	300	320	360	360	370	400	370	380	350	280	230	220	270	270	240	270	287
23	270	280	230	260	240	230	290	270	320	360	370	390	380	390	390	340	360	290	300	360	290	260	220	220	305
24	260	250	260	290	290	280	260	260	300	330	340	400	390	400	420	370	360	280	310	320	300	230	230	250	308
25	260	260	q240	q320	330	300	280	280	350	...c	...c	...c	...c	...c	...c	...c	360	290	290	270	270	230	220	220	...
26	260	230	240	250	360	380	280	230	330	360	400	390	420	450	390	360	320	270	300	q280	240	240	220	230	310
27	220	240	240	q280	q320	q290	290	270	290	330	360	390	390	390	380	390	370	230	230	280	230	220	210	250	302
28	q260	q230	240	290	300	290	330	280	340	360	370	390	390	410	380	370	320	270	290	q240	q260	240	220	230	304
29	240	240	280	310	370	420	300	240	300	330	390	380	390	400	420	370	330	270	300	270	290	270	220	240	318
30	240	230	240	270	270	300	300	250	310	340	360	390	380	360	390	370	320	260	290	300	270	290	230	270	305
31	255	250	280	290	300	290	280	260	360	360	360	360	420	400	390	320	330	250	250	300	270	230	220	220	302
MEAN*	242	245	254	271	290	293	283	266	317	338	363	390	398	397	386	356	328	275	295	307	288	258	240	238	305

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 165

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1941

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.5	4.9	4.8	4.8	4.8	4.7	4.6	p4.5c	4.4	...	...
2	...	...	4.7	4.8	4.7	4.7	4.7	4.6	4.6	4.6	4.5	...	...
3	...	...	4.5	4.8	4.6	4.6	4.8	4.7	4.8	4.9	4.8	...	...
4	...	...	4.5	4.7	4.9	4.8	4.8	4.8	4.8	4.8	4.4	...	...
5	...	...	4.6	4.5	4.6	4.7	4.7	4.1	4.6	4.6	4.4	...	...
6	...	...	4.5	4.6	4.8	4.8	4.8	4.6	4.5	4.5	4.4	...	...
7	...	4.2	4.5	4.7	4.8	4.7	4.7	4.7	4.5	4.6	4.3	...	...
8	...	...	4.7	4.9	4.9	4.8	4.7	4.6	4.7	4.7	4.0	...	...
9	...	...	4.6	4.8	4.7	4.8	4.8	4.6	4.8	4.8	4.4	...	...
10	...	...	4.6	4.8	4.8	4.8	4.8	4.6	4.5	4.8	4.4	...	...
11	...	4.0	4.5	4.8	4.9	4.8	4.7	4.7	4.8	4.8	4.4	...	...
12	...	...	4.5	4.6	4.8	4.8	4.8	4.7	p4.8c	p4.7c	p4.4c	...	...
13	...	...	4.6	4.6	4.8	4.7	4.7	4.6	4.9	4.8	4.4	...	...
14	...	...	4.5	4.5	4.7	4.7	4.7	4.8	p4.9c	p4.7c	4.5	...	...
15	...	...	4.4	4.5	4.7	p4.7c	p4.8c	p4.9c	4.8	4.8	p4.5c	...	...
16	...	...	p4.5c	4.7	4.8	4.8	4.8	4.8	4.8	4.9	4.6	...	...
17	...	...	p4.5a	4.8	4.8	4.7	4.7	4.8	p4.8c	p4.7c	p4.6c	...	...
18	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
19	...	...	...c	...c	...c	...c	...c	...c	4.8	4.7	4.6	...	...
20	...	...	4.8	4.9	4.9	4.9	4.8	4.8	4.8	4.5	4.6	...	...
21	...	...	4.6	4.8	4.9	4.8	4.9	4.8	4.7	4.6	4.7	...	...
22	...	...	4.6	4.8	4.8	4.8	4.8	4.8	4.7	4.7	4.6	...	...
23	...	...	p4.5e	4.7	4.9	4.7	4.8	4.8	4.7	4.7	4.5	...	...
24	...	...	4.5	4.8	4.7	4.7	4.8	4.8	4.7	4.7	4.5	...	...
25	...	...	4.7	...a	...c	...c	...c	...c	...c	...c	4.5	...	...
26	...	...	4.6	4.5	4.8	4.6	4.7	4.8	4.7	4.6	4.4	...	...
27	...	...	4.5	4.8	4.8	4.7	4.8	4.7	4.5	4.6	4.6	...	...
28	...	...	4.5	4.7	4.7	4.7	4.7	4.8	4.6	4.5	4.4	...	...
29	...	...	4.5	4.6	4.8	4.6	4.6	4.6	4.8	4.6	4.4	...	...
30	...	...	4.6	4.7	4.7	4.7	4.6	4.6	4.7	4.5	4.4	...	...
31	...	...	4.7	4.6	4.7	4.6	4.8	4.6	4.5	4.5	4.5	...	...
*MEAN	...	4.1	4.6	4.7	4.8	4.7	4.8	4.7	4.7	4.7	4.5	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	210	240	250	220	230	220	p215c	210	...	...
2	...	...	240	240	240	230	220	220	220	220	240	...	...
3	...	...	240	220	230	230	220	220	210	220	250	...	...
4	...	...	250	220	230	230	220	230	220	220	260	...	...
5	...	...	240	220	220	200	220	240	220	220	220	...	...
6	...	...	250	240	230	240	240	230	220	220	250	...	...
7	...	270	240	230	230	230	210	220	200	230	p270	...	...
8	...	...	260	240	260	250	240	220	230	210	260	...	...
9	...	...	260	250	230	230	240	240	230	200	230	...	...
10	...	...	260	230	230	220	220	230	220	220	240	...	...
11	...	260	260	240	220	210	220	210	220	230	260	...	...
12	...	...	250	240	230	240	230	220	p220c	p230c	p240c	...	...
13	...	...	260	240	220	220	220	220	220	220	250	...	...
14	...	...	240	240	220	220	230	220	p210c	p220c	230	...	...
15	...	...	240	220	230	p220c	p210c	p220c	220	220	p240c	...	...
16	...	...	...	210	220	220	240	230	230	220	230	...	...
17	...	...	...	240	230	210	220	210	p220c	p230c	p240c	...	...
18	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
19	...	...	...	...	...	...	...	...	220	220	250	...	...
20	...	...	230	240	240	230	230	210	240	210	240	...	...
21	...	...	230	230	230	220	220	220	210	210	270	..	...
22	...	...	260	250	220	220	220	210	220	220	250	...	...
23	...	...	220	220	240	220	220	220	220	200	260	...	...
24	...	...	240	220	230	200	200	220	230	220	250	...	...
25	...	...	230	230	220	230	220	230	240	240	260	...	...
26	...	...	240	240	240	210	200	210	220	200	250	...	...
27	...	...	240	260	230	220	210	220	220	220	260	...	...
28	...	...	250	240	220	210	240	230	240	220	245	...	...
29	...	...	230	240	230	240	220	230	240	210	220	...	...
30	...	...	230	240	240	220	240	230	240	240	230	...	...
31	...	...	260	220	220	220	220	240	220	240	240	...	...
*MEAN	...	265	244	233	230	224	223	224	223	220	245	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 166

MAY 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1941

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.7	0.8	1.1	1.2	1.3	1.3	1.1	1.2	p1.2c	1.0	1.0	0.9
2	0.7	0.8	1.0	1.1	1.2	1.3	1.3	1.3	1.2	1.2	1.1	0.9	0.9
3	0.7	0.7	0.9	1.0	1.1	1.2	1.1	1.1	1.0	p2.2b	1.0	1.0	0.5
4	0.7	0.8	0.8	1.4	1.1	1.1	1.2	1.2	1.2	1.1	1.0	1.0	0.7
5	0.7	0.7	0.9	1.0	1.2	1.1	1.2	1.4	1.3	1.1	1.0	0.8	0.6
6	0.7	0.6	0.8	0.9	1.0	1.0	1.2	1.1	1.1	1.1	1.0	p0.8	0.6
7	0.6	0.6	1.0	1.0	1.2	1.0	1.1	1.1	1.0	1.0	0.8	0.6	0.6
8	0.8	0.8	1.1	2.7	2.1	2.1	1.9	1.3	1.2	1.1	1.0	0.8	0.7
9	0.6	0.8	1.0	1.2	1.2	1.1	1.3	1.4	1.2	1.2	1.1	0.8	0.6
10	0.6	0.8	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.0	1.0	0.7	0.6
11	0.9	0.6	1.0	1.1	1.1	1.2	1.8	1.2	1.2	1.2	1.0	0.7	0.7
12	0.9	0.8	1.1	1.2	1.1	1.1	1.0	1.3	...c	...c	...c	...c	...c
13	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.2	1.2	1.1	1.0	1.0	0.6
14	p0.8c	p0.9c	1.0	1.2	1.2	1.7	1.7	1.7	p1.4c	p1.2c	1.1	0.9	0.6
15	0.6	0.9	1.0	1.0	1.1	p1.2c	p1.3c	p1.2c	1.0	1.1	1.1	0.6	0.6
16	1.0	p1.1c	p1.2c	1.2	1.2	1.4	1.8	1.7	1.4	1.3	1.2	1.1	0.7
17	...c	...c	...c	1.2	1.0	1.8	1.8	1.8	...c	...c	...c	...c	...c
18	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
19	...c	...c	...c	...c	...c	...c	...c	...c	2.0	1.2	0.8	0.9	0.7
20	0.9	0.9	1.1	1.2	1.2	1.4	1.3	1.3	1.2	1.3	1.2	0.8	0.8
21	1.0	1.0	1.0	1.2	1.0	1.2	1.2	1.0	0.9	1.2	0.8	0.8	0.8
22	1.2	1.0	0.9	1.2	1.1	0.9	1.3	1.3	1.3	1.0	1.0	0.9	0.7
23	0.9	1.0	0.9	0.7	1.2	1.3	1.1	1.2	1.2	1.2	1.0	1.0	0.9
24	0.8	0.6	0.8	1.2	1.1	1.2	1.3	1.2	1.0	1.0	1.0	0.9	0.6
25	0.6	0.8	0.6	1.1	1.0	1.2	1.2	1.2	0.8	1.0	0.7	1.0	0.6
26	0.8	0.8	0.8	1.0	0.9	1.3	1.4	0.8	0.8	0.9	0.8	0.7	p0.7
27	0.6	0.9	1.1	1.8	1.3	1.3	1.3	1.2	1.2	1.2	1.0	0.7	0.7
28	0.9	0.8	0.8	1.2	1.2	1.2	1.4	1.2	1.2	1.2	1.1	1.0	0.8
29	0.6	0.9	0.8	1.1	1.3	1.4	1.3	1.2	1.7	1.2	1.0	1.0	0.6
30	0.7	0.7	0.8	0.8	1.2	1.2	1.2	1.2	1.1	1.2	1.0	0.8	0.6
31	0.8	0.7	1.0	1.4	1.0	1.2	1.1	1.2	1.2	1.2	1.0	1.0	0.6
* MEAN	0.8	0.8	1.0	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.0	0.9	0.7

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.3	2.3	2.8	3.1	3.7	4.0	4.0	4.0	3.7	p3.2c	2.6	2.3	0.9
2	1.4	2.4	2.5	3.0	3.2	3.2	3.0	3.2	3.5	3.0	2.8	2.0	0.9
3	1.3	2.4	2.8	3.2	3.2	3.1	p4.1	3.6	3.2	p3.2b	2.8	2.0	0.9
4	1.1	2.2	2.5	3.0	3.7	3.8	3.7	3.0	3.4	2.8	2.2	1.9	0.9
5	1.4	2.3	2.8	3.0	3.3	3.5	3.6	3.8	3.5	3.0	2.2	2.0	0.8
6	1.2	2.3	2.8	3.1	p4.0	3.8	3.7	3.8	3.8	3.0	2.9	p2.0c	0.9
7	1.3	2.3	2.6	3.1	3.8	3.8	3.7	3.6	2.7	2.9	2.8	1.9	0.9
8	1.3	2.2	3.0	3.9	3.9	4.0	4.0	3.8	3.8	3.0	2.7	2.0	0.8
9	1.2	1.9	2.7	3.2	3.5	3.9	3.9	3.8	3.7	2.8	2.6	2.0	0.8
10	1.2	2.2	3.2	3.1	3.6	3.0	3.8	3.8	3.7	2.7	2.7	2.0	0.8
11	1.4	2.2	2.7	3.1	3.5	3.8	3.9	3.7	3.8	2.9	2.8	2.0	0.8
12	1.2	2.0	2.4	2.4	2.3	3.6	3.6	3.6	...c	...c	...c	...c	...c
13	1.3	2.2	2.9	2.8	2.5	3.5	3.6	3.6	3.0	2.6	2.7	2.1	0.8
14	p1.3c	p2.2c	2.7	2.8	3.1	3.3	3.6	3.8	p3.4c	p3.0c	2.6	2.0	2.0
15	1.3	2.3	2.8	3.0	3.7	p3.8c	p3.7c	p3.6c	3.5	3.0	2.7	2.8	0.8
16	1.3	p2.2c	p2.8c	3.3	3.4	3.7	3.8	3.8	3.5	3.0	2.6	2.0	1.0
17	...c	...c	...c	3.3	3.4	3.8	3.7	3.7	...c	...c	...c	...c	...c
18	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
19	...c	...c	...c	...c	...c	...c	...c	...c	3.3	3.1	2.4	2.1	1.2
20	1.3	2.4	2.8	3.2	3.5	3.7	3.6	3.5	3.4	2.9	2.8	2.1	0.8
21	1.4	2.3	2.6	2.7	3.3	3.5	3.6	3.4	2.4	3.0	2.8	2.1	0.8
22	1.3	2.3	2.5	2.7	3.4	3.6	3.6	3.4	2.9	3.0	2.7	1.8	0.8
23	1.4	2.2	2.5	2.5	2.9	3.4	3.6	3.4	3.3	3.1	2.5	2.0	1.0
24	1.2	2.3	2.6	2.9	3.0	2.9	3.1	3.4	3.4	2.7	2.7	1.9	0.8
25	1.2	2.3	2.5	2.5	3.0	2.7	2.6	2.8	2.2	2.6	2.6	1.9	0.9
26	1.2	2.0	2.8	2.7	2.8	3.6	3.8	p3.5	3.3	2.8	2.0	1.8	1.0
27	1.4	2.3	2.8	3.6	2.8	3.8	3.6	3.5	3.3	2.8	2.4	2.0	0.8
28	1.1	1.9	2.4	2.8	3.3	3.9	3.6	3.7	3.9	2.8	2.4	2.0	0.9
29	1.2	2.2	2.3	3.4	2.9	2.8	2.8	3.4	3.4	2.9	2.3	2.1	1.7
30	1.2	1.8	2.3	3.4	3.5	3.5	3.4	3.0	2.8	3.0	2.5	1.8	0.8
31	1.2	2.3	2.7	3.0	2.7	2.9	2.8	2.8	3.1	3.2	2.5	1.8	0.8
* MEAN	1.3	2.2	2.7	3.0	3.3	3.5	3.6	3.5	3.3	2.9	2.6	2.0	1.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = $f^{o}F2$ EQUAL TO OR LESS THAN $f^{o}F1$ h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 167

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1941 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JUNE 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	5.3	5.0	6.1	5.8	5.1	4.3	3.0	5.9	7.4	7.6	7.7	7.4	7.2	7.3	7.5	7.2	8.3	7.7	7.0	6.3	6.3	6.9	6.5	5.2	6.4
2	4.3	4.2	4.9	4.9	4.3	4.1	p3.9c	p6.3c	7.4	7.6	7.3	7.6	7.2	6.5	6.6	6.9	...c	...c	...c	...c	...c	...c	...c	...c	...
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.2	8.0	8.3	7.6	7.4	7.2	6.7	6.9	5.6	...
5	5.8	5.3	4.8	4.8	4.8	p4.5	4.4	6.9	7.6	7.6	7.1	7.3	6.8	6.7	6.9	p7.0c	7.0	7.3	7.2	6.6	6.4	6.7	6.9	5.7	6.3
6	5.5	6.0	4.9	4.5	3.5	2.7	3.6	6.6	8.0	8.6	p8.2c	7.8	7.7	8.3	8.7	7.8	7.4	7.4	7.8	7.1	7.2	7.2	6.3	6.0	6.6
7	6.0	4.7	4.7	3.7	3.3	3.2	3.0	6.1	p7.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.1	7.4	6.7	5.9	5.6	5.5	6.3	6.1	5.0	...
9	4.9	5.0	4.8	4.8	4.5	4.1	4.0	5.9	7.9	7.0	7.5	7.4	7.0	8.2	8.3	8.4	8.8	9.0	8.7	8.3	7.7	9.1	7.5	7.4	6.9
10	6.6	5.3	4.1	3.6	4.3	p3.0f	3.3	5.8	7.5	7.8	7.0	7.5	8.3	8.0	7.9	p7.9c	7.9	7.6	7.0	8.4	8.7	8.0	7.0	6.3	6.6
11	4.7	4.5	4.5	4.3	3.7	p3.3f	2.9	6.2	7.6	7.8	7.3	7.5	7.1	7.7	7.9	8.3	8.6	9.5	8.2	7.5	8.0	7.3	8.1	6.2	6.6
12	5.7	5.2	4.8	3.7	3.3	2.8	3.6	6.5	7.5	7.6	7.7	7.7	7.5	7.6	7.1	7.4	7.8	8.8	8.3	7.5	7.0	7.6	6.2	3.3	6.3
13	2.6	2.6	2.4	1.7	1.4	1.3	3.5	6.1	7.1	7.8	7.9	7.9	7.1	6.7	6.7	7.6	8.4	7.4	7.1	6.0	p4.8	p4.8	5.7	5.0	5.4
14	4.4	4.2	4.7	4.2	3.6	3.7	2.7	5.8	7.4	7.5	7.3	7.2	7.6	7.2	7.3	7.8	8.8	8.3	8.0	6.8	6.6	6.2	6.1	5.5	6.2
15	4.9	4.9	4.8	5.1	5.5	3.7	3.8	6.5	8.7	7.5	6.6	6.6	7.4	8.2	8.2	8.2	8.1	8.2	7.2	6.1	5.9	5.9	5.6	4.9	6.4
16	4.9	5.1	5.0	4.5	3.8	3.0	3.9	6.1	7.9	7.9	7.5	6.8	7.0	7.4	7.0	7.8	7.4	p7.2	6.9	5.7	p5.5c	p5.2c	p4.8c	p4.5c	6.0
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.0	7.0	7.0	7.2	7.2	7.9	7.7	7.0	7.8	6.8	6.1	5.8	5.5	6.1	...
18	p5.9f	p5.5f	p5.1f	p4.7f	4.3	3.5	2.8	4.8	6.1	7.0	7.2	7.3	7.6	7.8	8.3	8.2	7.3	7.5	7.4	6.5	5.2	5.0	4.6	4.8	6.0
19	4.6	4.4	4.5	4.4	3.8	3.3	3.9	5.8	7.2	7.6	6.7	7.0	7.2	7.3	7.7	7.3	7.5	7.8	7.3	6.6	7.3	6.3	6.2	6.3	6.2
20	6.3	7.1	6.3	4.8	4.5	4.4	2.7	5.2	6.7	7.5	7.3	7.3	7.4	7.7	7.6	7.6	7.8	7.0	6.5	5.5	4.5	4.6	5.0	4.5	6.1
21	4.4	4.8	5.6	5.2	4.7	4.5	p3.4	5.6	7.3	7.9	8.4	7.5	7.6	7.8	7.4	6.9	7.4	7.9	8.3	7.4	7.4	p7.2	p6.2	4.7	6.5
22	3.4	2.8	2.4	2.1	1.6	1.3	2.9	5.0	6.4	6.2	6.4	6.4	6.6	6.8	6.8	6.6	6.7	6.6	6.5	6.0	7.0	6.8	5.4	4.8	5.1
23	4.5	4.7	5.1	4.6	3.6	3.7	4.3	5.1	6.7	7.1	7.0	7.7	7.0	7.4	7.0	7.4	7.8	8.7	7.7	6.8	6.5	7.3	6.9	4.7	6.2
24	4.2	3.4	3.5	2.9	3.1	2.7	3.1	5.6	7.0	6.7	6.6	6.4	6.0	6.5	7.0	7.0	6.9	7.8	7.8	7.5	6.8	7.1	7.2	5.0	5.7
25	3.8	3.7	4.2	p3.6f	p3.6f	p3.5f	3.4	5.8	7.3	7.6	7.0	7.2	6.8	7.0	7.6	7.5	7.7	8.0	8.0	7.3	6.3	7.0	6.5	5.6	6.1
26	5.5	5.1	5.1	5.3	4.8	4.5	4.3	5.5	6.6	7.0	7.2	7.1	7.0	7.0	7.1	8.1	8.8	7.7	7.4	7.4	7.9	8.4	5.8	4.4	6.5
27	3.5	3.2	p3.5f	p3.3f	p3.4f	p3.5f	3.5	5.3	5.9	6.2	6.7	6.4	6.8	7.0	6.7	7.2	7.5	7.0	7.5	6.6	7.2	7.5	5.8	4.5	5.7
28	3.8	3.3	3.0	3.0	2.6	2.4	3.2	p5.9	7.2	7.8	7.2	6.1	6.9	6.7	7.3	6.7	p7.5	8.4	8.3	6.8	7.0	7.6	7.0	5.7	5.9
29	5.0	3.8	3.8	3.6	3.5	3.8	4.0	5.2	6.5	6.4	6.3	6.4	6.5	6.8	6.7	6.6	6.8	7.5	7.2	6.6	6.8	6.5	6.0	6.1	5.8
30	4.9	4.6	4.1	3.2	3.0	2.9	3.5	5.8	7.8	7.2	6.8	6.7	7.1	7.4	8.0	8.2	7.9	7.4	6.8	6.6	6.2	6.5	5.6	5.4	6.0
31																									
MEAN*	4.8	4.6	4.5	4.1	3.8	3.4	3.5	5.8	7.2	7.4	7.2	7.1	7.1	7.3	7.4	7.5	7.8	7.8	7.5	6.8	6.6	6.8	6.2	5.3	6.2

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 168

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1941 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JUNE 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	250	260	270	270	260	300	290	280	330	360	390	400	390	420	390	390	330	260	300	300	260	310	240	250	313
2	250	230	270	270	240	250	q265c	q285c	300	300	320	360	430	420	420	400	...c	...c	...c	...c	...c	...c	...c	...c	...
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	340	330	240	260	250	230	230	220	220	...
5	220	210	240	260	270	250	240	240	300	320	360	340	360	400	400	q360c	320	260	270	270	260	250	230	230	286
6	230	255	250	250	240	230	270	250	310	360	q360c	360	410	430	380	380	260	270	270	340	260	220	240	240	294
7	230	240	250	260	285	340	280	260	320	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	350	310	240	290	300	280	260	210	230	...
9	230	230	230	220	220	210	260	220	280	300	350	350	440	390	310	320	230	250	250	270	260	220	230	220	270
10	210	220	210	250	350	360	270	240	320	300	320	350	320	310	340	q335c	330	260	290	260	230	230	220	230	281
11	240	230	240	280	300	260	280	290	310	320	350	380	350	330	370	330	300	250	270	240	250	230	210	240	285
12	230	250	260	280	250	250	270	240	300	330	360	360	400	370	320	290	240	270	270	260	240	230	210	220	279
13	230	240	240	230	280	280	250	260	300	330	380	380	380	410	380	350	310	260	310	360	420	350	290	240	311
14	240	250	250	280	300	310	300	260	300	310	340	370	380	360	350	340	290	250	310	300	290	280	250	230	298
15	240	250	270	290	220	250	270	250	320	290	400	370	350	350	340	330	320	240	290	320	300	280	280	230	294
16	240	240	220	230	220	240	250	230	310	360	360	420	390	360	320	360	360	340	290	330	q310c	q280c	q260c	q240c	298
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	330	400	380	360	370	340	290	230	260	330	350	320	310	260	...
18	260	240	240	280	230	250	290	240	340	320	350	340	360	360	360	310	200	240	280	340	320	280	230	220	287
19	230	220	230	230	230	230	260	230	320	320	350	380	370	390	q380	370	200	240	270	280	300	230	210	250	280
20	240	240	220	270	300	290	290	240	300	340	320	360	330	370	350	320	280	230	280	370	360	280	240	230	294
21	240	240	230	280	280	250	270	240	280	300	340	350	350	390	330	290	310	240	250	250	240	220	210	220	275
22	230	250	250	230	240	290	270	230	350	360	440	370	410	360	400	380	310	240	280	280	250	210	200	230	294
23	240	240	240	230	240	230	260	240	320	310	360	350	400	400	320	340	310	240	260	250	230	220	300	230	282
24	230	240	250	250	230	220	260	240	320	320	350	490	410	440	390	360	220	260	250	230	230	220	220	220	285
25	260	280	290	250	240	240	270	230	300	300	360	370	420	420	390	340	300	240	270	300	300	240	200	230	293
26	230	240	250	250	250	240	280	230	300	340	330	360	440	390	370	340	290	240	270	250	220	200	210	210	280
27	260	310	350	310	280	370	260	240	330	360	430	400	440	410	440	350	330	240	280	230	220	210	210	210	311
28	240	250	260	240	240	240	280	230	290	330	370	390	380	440	400	310	320	240	260	290	280	230	220	220	290
29	230	250	290	300	290	250	260	220	320	360	410	420	410	390	420	330	370	250	270	280	240	230	220	210	301
30	210	230	250	240	270	300	280	240	310	350	400	410	400	390	360	340	320	250	260	290	330	240	240	240	298
31																									
MEAN*	236	244	252	259	260	267	270	244	311	328	363	378	389	387	369	343	296	251	275	288	276	248	234	230	292

* = ALL TABULATED VALUES; a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E; b = LOSS OF RECORD DUE TO ABSORPTION; c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER; e = BELOW LOWER LIMIT OF RECORDER; f = SPREAD ECHOES PRESENT; g = f^0F2 EQUAL TO OR LESS THAN f^0F1; h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY; k = IONOSPHERIC STORM IN PROGRESS; p = INTERPOLATED VALUE; q = DOUBTFUL VALUE

TABLE 169

JUNE 1941 JUNE 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.5	4.7	4.7	4.6	4.7	4.7	4.6	4.5	4.3	...	...
2	...	...	4.5	4.7	4.7	4.7	4.6	4.6	4.6	4.7	p4.5c	...	...
3	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
4	...	...	...c	...c	...c	...c	...c	...c	...c	4.5	4.7	...	...
5	...	...	4.7	4.5	4.8	4.8	4.6	4.7	4.7	p4.5c	4.3	...	...
6	...	...	4.6	4.8	p4.8c	4.9	4.8	4.6	4.5	4.7	p4.5	...	...
7	...	...	4.7	...c	...c	...c	...c	...c	...c	...c	...c	...	...
8	...	...	...c	...c	...c	...c	...c	...c	...c	4.5	4.4	...	...
9	...	...	4.6	4.8	4.8	4.8	5.0	4.8	4.7	4.5	...	...	...
10	...	...	4.7	4.7	4.7	4.8	4.7	4.7	4.5	p4.5c	4.4	...	...
11	...	...	4.6	4.5	4.7	4.8	4.9	4.7	4.8	4.6	4.4	...	...
12	...	...	4.5	4.7	4.8	4.4	4.8	4.6	4.5	4.5	...	...	...
13	...	...	4.6	4.6	4.8	4.8	4.8	4.8	4.6	4.5	4.3	...	...
14	...	...	4.5	4.6	4.6	4.8	4.8	4.7	4.5	4.4	4.4	...	...
15	...	...	4.5	4.6	4.7	4.6	4.6	4.7	4.5	4.6	4.4	...	...
16	...	...	4.6	4.6	4.6	4.8	4.7	4.6	4.5	4.3	p4.2c	...	...
17	...	...	p4.4c	p4.5c	4.5	4.7	4.6	4.6	4.7	4.6	4.0	...	...
18	...	...	4.4	4.3	4.5	4.7	4.7	4.5	4.5	4.3	...	...	...
19	...	...	4.5	4.5	4.6	4.6	4.6	4.6	p4.5	4.5	...	...	...
20	...	...	4.5	4.6	4.5	4.7	4.6	4.6	4.5	4.5	4.2	...	...
21	...	...	4.5	4.4	4.6	4.6	4.5	4.6	4.5	4.3	4.1	...	...
22	...	...	4.4	4.5	4.6	4.5	4.5	4.5	4.5	4.4	4.3	...	...
23	...	...	4.5	4.6	4.6	4.5	4.7	4.7	4.5	4.3	4.4	...	...
24	...	...	4.6	4.6	4.7	4.8	4.6	4.8	4.6	4.6	...	...	...
25	...	...	4.6	4.6	4.7	4.7	4.7	4.7	4.6	4.6	4.4	...	...
26	...	...	4.3	4.8	4.6	4.6	4.7	4.7	4.6	4.5	4.3	...	...
27	...	...	4.4	4.6	4.8	4.7	4.9	4.8	4.8	4.6	4.5	...	...
28	...	...	4.5	4.6	4.6	4.8	4.7	4.7	4.6	4.5	4.4	...	...
29	...	...	4.5	4.6	4.7	4.7	4.7	4.6	4.8	4.5	4.6	...	...
30	...	...	4.5	4.6	4.9	4.7	4.7	4.6	4.6	4.6	4.4	...	...
31													
* MEAN	...	...	4.5	4.6	4.7	4.7	4.7	4.7	4.6	4.5	4.4	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	250	220	220	230	230	220	230	220	230	...	...
2	...	...	p1 0c	180	190	200	220	220	240	240	240	...	...
3	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
4	...	...	...c	...c	...c	...c	...c	...c	...c	210	220	...	...
5	...	...	210	220	200	200	190	210	230	p230c	230	...	...
6	...	...	240	230	p220c	200	230	220	230	220	230	...	...
7	...	...	250	...c	...c	...c	...c	...c	...c	...c	...c	...	...
8	...	...	...c	...c	...c	...c	...c	...c	...c	210	210	...	...
9	...	...	220	220	210	200	210	220	210	200	230	...	...
10	...	...	220	210	210	200	210	220	230	p230c	230	...	...
11	...	250	230	220	210	210	210	210	210	210	240	...	...
12	...	...	220	220	220	210	200	210	200	210	240	...	...
13	...	...	230	220	230	220	200	200	210	220	240	...	...
14	...	...	230	230	220	210	220	220	210	220	230	...	...
15	...	...	220	220	210	210	210	210	220	220	230	...	...
16	...	...	210	210	210	210	200	200	200	200	p220c	...	...
17	...	...	p210c	p200c	200	190	190	210	210	200	210	...	...
18	...	...	230	210	210	200	200	220	210	220	210	...	...
19	...	...	210	210	210	200	210	210	p220	210	210	...	...
20	...	...	230	210	210	210	200	200	210	200	200	...	...
21	...	...	220	210	200	200	200	200	180	210	230	...	...
22	...	...	220	220	200	200	200	200	200	200	210	...	...
23	...	...	210	200	200	200	200	210	210	200	200	...	...
24	...	...	210	210	210	200	200	200	210	210	...	...	...
25	...	...	230	210	210	200	200	200	210	210	210	...	...
26	...	...	220	210	200	200	200	200	210	210	220	...	...
27	...	...	220	220	210	200	200	210	210	200	210	...	...
28	...	...	200	220	200	180	190	180	200	210	220	...	...
29	...	...	210	210	200	200	210	205	200	200	220	...	...
30	...	...	220	235	210	200	210	200	200	200	210	...	...
31													
* MEAN	...	250	220	214	209	203	206	208	212	212	222	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 170

JUNE 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1941

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	1.0	1.0	1.2	1.2	1.3	1.4	1.3	1.3	1.2	1.2	1.1	0.9	1.2	2.1	2.4	2.3	2.9	3.5	3.4	2.8	3.5	2.8	2.5	2.0	0.9
2	p0.9c	p1.1c	1.2	1.1	1.2	1.3	1.2	1.3	1.3	1.2	...c	...c	...c	p1.1c	p2.3c	2.8	3.0	3.4	3.5	3.5	3.4	3.4	3.0	...c	...c	...c
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
4	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.2	1.2	0.7	0.6	...c	...c	...c	...c	...c	...c	...c	...c	...c	2.8	2.4	2.0	0.9
5	0.8	0.6	0.6	0.9	1.2	1.7	1.3	1.2	1.3	p1.2c	1.0	0.6	0.6	1.3	2.4	2.9	2.9	2.8	3.6	3.5	3.5	3.4	p2.9c	2.5	2.1	0.9
6	1.0	1.0	1.1	1.2	p1.4c	1.7	2.4	1.8	1.4	1.2	1.6	0.8	1.0	1.3	2.4	2.8	3.1	p3.4c	3.8	4.0	3.9	3.7	3.0	2.9	2.1	1.0
7	1.0	1.2	2.7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.0	2.4	p3.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
8	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.2	1.0	0.7	0.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	3.0	2.5	2.0	0.8
9	0.8	1.2	1.7	2.3	1.4	1.8	1.4	1.8	1.1	1.1	1.0	1.0	0.7	1.3	2.4	2.8	p3.1c	3.5	3.6	3.8	3.7	3.4	3.0	2.8	2.0	1.9
10	0.8	0.7	1.0	1.1	1.1	1.7	2.0	1.7	1.0	p1.0c	1.0	0.8	0.6	1.2	2.3	2.8	3.0	3.4	3.7	4.0	3.7	3.0	p2.8c	2.5	1.9	1.0
11	0.6	0.7	1.0	1.1	1.1	1.1	1.2	1.1	1.0	1.0	1.0	0.8	0.6	1.2	2.2	2.8	2.8	3.4	3.0	3.7	3.5	3.4	2.9	2.8	1.9	0.8
12	0.6	0.6	0.8	1.0	1.0	1.2	1.3	1.2	1.0	1.0	0.9	0.8	0.6	1.0	2.2	2.9	3.0	3.4	3.6	3.8	3.6	3.2	3.0	2.7	1.9	0.8
13	0.8	0.6	1.0	1.0	1.1	1.1	1.2	1.1	1.0	1.0	0.7	0.8	0.6	1.3	2.2	2.6	3.0	3.3	3.7	3.8	3.7	3.3	2.9	2.4	1.9	0.8
14	0.6	0.6	1.2	1.8	1.4	1.3	1.1	1.2	1.1	1.0	0.8	0.7	0.6	1.0	2.2	2.8	3.1	3.4	3.2	3.6	3.5	3.0	2.8	2.8	1.9	0.8
15	0.7	0.6	1.0	1.1	1.1	1.1	1.2	1.1	1.1	1.0	0.7	0.6	0.6	1.3	2.2	2.7	3.0	3.2	3.4	3.5	3.5	3.3	2.7	2.2	2.0	0.8
16	0.8	0.8	1.0	1.2	1.2	1.2	1.2	1.2	1.0	1.0	p0.8c	p0.7c	0.6	1.2	2.3	2.8	3.1	3.3	3.1	2.9	3.4	3.3	2.9	p2.4c	p2.0c	0.9
17	...	...	...	...	1.9	1.2	1.2	1.2	1.1	1.0	0.6	0.7	0.6	...c	...c	...c	...c	3.4	3.4	3.1	2.9	3.2	2.8	2.4	1.9	0.8
18	0.6	0.7	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.0	0.6	0.8	1.0	2.2	2.7	3.1	3.3	3.4	3.4	3.3	3.1	2.9	2.4	1.9	0.8
19	0.6	0.6	0.7	1.0	1.1	1.1	1.2	1.2	1.2	1.0	0.7	0.7	0.6	1.1	2.3	2.4	2.8	3.4	3.3	3.4	3.3	3.2	2.8	2.2	2.1	1.4
20	0.6	0.6	0.6	1.0	1.2	1.2	1.2	1.1	1.2	1.0	0.9	0.7	0.5	1.0	2.1	2.6	2.8	2.8	3.3	3.1	3.3	3.1	2.8	2.4	1.8	1.0
21	0.6	0.7	1.0	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.1	0.6	0.6	1.1	2.2	2.7	2.9	2.9	3.3	3.3	3.4	3.2	2.8	2.7	2.0	1.1
22	0.6	0.7	1.0	1.0	1.2	1.1	1.2	1.2	1.2	1.0	0.7	0.6	0.6	1.0	2.0	2.8	2.8	2.8	3.4	3.4	3.3	2.9	2.9	2.6	2.0	0.8
23	0.6	0.6	0.9	1.2	1.2	1.2	1.2	1.9	1.3	1.2	1.1	0.8	0.6	1.0	2.1	2.5	2.8	2.8	3.4	3.6	3.7	3.4	3.1	2.9	2.0	0.9
24	0.7	0.7	0.7	1.0	1.2	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.6	1.2	2.0	2.7	3.0	3.4	3.4	3.5	3.4	3.3	2.8	2.5	2.2	1.0
25	0.6	0.7	0.9	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.0	0.7	0.6	1.0	2.3	2.8	3.0	3.1	3.4	3.4	3.2	3.2	2.8	2.5	2.0	0.9
26	0.6	0.6	0.9	1.2	1.2	1.2	1.2	1.3	1.2	1.3	1.0	0.6	0.6	1.2	2.2	2.8	2.9	3.4	3.4	3.5	3.4	3.3	3.0	2.8	2.9	1.0
27	0.7	1.0	1.2	1.1	1.2	2.0	2.0	1.3	1.2	1.0	0.7	0.7	0.8	2.1	2.3	3.1	3.3	3.4	3.7	3.6	3.4	2.8	2.5	2.1	0.8	1.2
28	0.6	0.8	0.9	1.1	1.2	1.2	1.2	1.2	1.2	1.0	1.0	0.6	0.6	1.2	2.3	2.9	3.1	3.4	3.5	3.5	3.5	3.4	3.0	2.5	1.9	0.9
29	0.6	0.6	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.0	0.8	0.6	1.2	2.2	2.6	2.9	3.4	3.4	3.5	3.5	3.3	2.9	2.5	2.1	1.0
30	0.5	0.6	0.6	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	0.7	0.6	1.0	2.1	2.2	3.2	3.2	3.3	3.4	3.4	3.2	3.1	2.7	3.1	1.2
31																										
* MEAN	0.7	0.8	1.0	1.2	1.2	1.3	1.3	1.3	1.2	1.1	1.0	0.7	0.6	1.2	2.2	2.7	3.0	3.2	3.4	3.5	3.4	3.3	2.9	2.5	2.0	1.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 171

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1941 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JULY 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	5.7	6.4	7.4	6.7	5.6	4.6	4.8	6.6	7.9	8.9	7.8	7.2	7.7	7.7	8.3	7.9	7.2	7.0	6.5	6.1	6.0	5.9	5.1	5.0	6.7
2	4.3	4.5	5.0	4.8	4.5	4.5	4.4	6.1	7.2	7.4	7.5	7.8	7.5	8.9	8.8	8.3	8.0	8.6	8.2	7.2	7.0	7.5	6.6	4.1	6.6
3	3.6	4.3	4.3	3.3	2.6	2.0	3.1	5.8	7.3	7.9	6.8	6.6	p7.2b	7.8	8.1	7.5	7.7	7.0	6.6	7.1	7.4	6.6	6.2	6.8	6.0
4	7.3	5.8	5.8	p4.8f	p4.3f	p4.4f	4.5	6.1	7.0	7.4	7.8	7.5	7.0	7.0	6.7	7.2	7.9	8.4	7.8	7.1	7.1	p7.0f	p7.0f	p6.9f	6.7
5	6.8	4.8	2.7	1.3	1.2	p2.0b	2.8	4.6	6.1	p4.9	p4.9	p4.9b	p4.8b	p4.8b	p4.7b	p4.6	p5.0	5.0	5.3	4.5	3.9	p2.5b	p1.9b	p1.8b	4.0
6	p2.2f	p2.6f	p2.2f	p2.0b	p2.2b	p2.4b	2.6	5.0	5.8	6.2	7.0	7.5	8.7	8.6	8.4	8.3	7.9	8.7	8.0	6.8	4.2	6.2	6.2	6.9	5.7
7	6.3	5.7	5.6	p4.6	p4.4	p3.8	2.7	6.2	6.7	6.7	6.7	6.7	7.0	6.8	6.8	7.4	6.9	6.5	6.7	6.8	7.3	6.0	4.8	2.9	5.9
8	2.7	3.0	2.9	2.0	1.4	1.1	2.8	5.6	7.6	7.2	7.1	7.0	7.3	7.0	7.0	6.8	7.0	7.1	7.7	7.2	7.1	6.5	5.8	5.0	5.5
9	5.3	4.9	4.9	4.5	4.0	3.2	3.4	5.9	7.2	7.2	7.0	6.7	6.5	6.1	6.5	6.9	7.0	6.7	6.6	6.7	7.0	7.3	5.9	5.1	5.9
10	4.7	4.6	4.5	3.4	2.2	2.1	3.0	5.6	6.7	7.2	7.4	7.4	6.8	7.8	7.6	6.6	7.1	6.9	7.0	7.1	7.8	6.5	4.1	3.8	5.7
11	3.2	3.7	3.1	2.9	2.5	p2.3f	2.5	5.9	6.8	8.3	8.4	7.9	7.0	7.2	7.0	p7.0c	6.9	6.7	6.7	5.5	6.0	5.6	5.2	5.2	5.6
12	4.6	3.7	3.1	2.8	2.4	2.3	2.9	5.3	6.5	7.6	8.0	7.2	7.2	6.8	7.2	6.8	6.6	7.0	6.3	5.5	5.3	5.2	4.5	4.4	5.4
13	4.8	5.2	4.7	4.0	4.1	3.9	3.9	5.4	6.8	7.5	6.7	6.3	6.5	6.6	6.6	7.0	6.6	7.3	7.8	6.8	6.9	7.4	5.2	4.7	5.9
14	5.1	4.3	3.8	3.4	2.9	2.0	2.9	5.7	7.0	...c	...c	...c	...c	...c	...c	6.4	6.8	6.9	7.2	7.5	6.6	6.9	5.3	4.2	...
15	4.7	5.1	4.9	3.7	3.1	2.6	2.5	5.0	6.3	7.1	7.2	6.7	6.6	6.7	7.0	6.7	6.8	6.4	6.4	6.1	5.6	5.5	4.9	4.3	5.5
16	4.2	5.4	5.7	5.3	4.8	4.4	4.0	6.6	7.7	8.9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.2	7.1	6.6	6.8	7.1	6.5	7.3	7.5	7.3	7.1	7.0	7.2	7.5	6.8	5.9	...
18	5.3	5.2	4.0	3.0	1.9	1.4	2.7	5.3	6.5	6.4	6.4	6.5	7.0	6.5	6.2	6.6	6.7	7.7	7.3	6.1	8.2	6.7	5.1	5.5	5.6
19	5.7	7.0	6.3	4.6	3.7	2.7	3.0	6.3	7.5	8.0	7.3	7.0	6.9	6.8	6.2	7.2	7.4	7.3	7.2	7.0	6.9	7.2	5.6	4.8	6.2
20	4.3	4.0	3.9	2.7	2.1	3.4	2.9	5.1	5.9	6.0	6.4	6.2	6.5	7.3	7.7	7.8	8.1	8.4	7.7	7.4	7.0	5.7	6.0	7.4	5.8
21	6.2	6.0	5.7	5.0	3.0	2.6	4.0	6.3	7.6	6.6	6.8	6.9	7.7	7.2	7.1	7.2	7.9	8.1	8.1	7.8	7.3	7.0	7.4	7.0	6.5
22	7.3	6.1	6.0	5.8	4.8	3.0	3.1	5.1	6.7	7.4	7.1	7.6	7.5	8.0	7.9	7.8	8.0	8.2	8.2	7.6	7.5	8.4	7.1	6.2	6.8
23	6.1	6.0	5.6	4.6	3.0	2.4	3.0	6.0	7.6	8.7	8.3	8.0	6.6	7.0	7.3	7.2	7.0	7.5	7.9	7.4	7.4	7.4	7.7	6.2	6.5
24	5.9	5.1	5.0	4.7	3.6	2.7	3.2	6.0	8.0	8.2	7.0	6.9	6.8	6.7	6.8	6.8	6.6	6.9	7.2	7.3	7.5	7.2	5.8	5.4	6.1
25	4.8	5.4	5.2	4.8	4.1	4.5	3.4	5.9	7.3	8.7	8.0	7.9	7.3	7.4	7.4	7.5	7.7	7.6	7.4	7.1	6.2	6.5	6.8	5.8	6.4
26	5.8	5.9	6.0	5.2	4.1	3.6	3.9	6.0	7.3	7.1	6.8	7.0	6.6	6.8	7.2	7.8	7.6	7.8	8.3	7.6	7.3	7.1	6.4	6.7	6.5
27	6.0	6.1	6.2	5.4	4.3	3.6	3.9	6.7	7.7	7.7	7.3	7.0	6.9	7.2	7.3	8.0	8.6	8.3	9.0	8.4	7.4	8.1	7.5	7.0	6.9
28	5.5	5.3	5.4	4.4	3.6	2.9	3.6	5.8	7.4	7.4	7.0	6.8	6.9	6.6	7.0	7.5	7.5	8.0	8.0	7.8	7.4	7.6	6.6	6.5	6.4
29	5.7	4.9	4.0	5.5	3.6	2.9	3.5	6.2	7.3	7.3	7.0	6.8	7.0	7.2	7.1	7.8	8.2	7.9	8.5	7.6	7.6	7.1	6.8	6.2	6.4
30	7.0	7.2	...c	...c	...c	...c	...c	...c	...c	...c	8.0	8.2	8.1	7.7	7.5	7.3	7.5	7.8	7.5	7.9	7.9	8.0	7.0	7.0	...
31	6.1	5.9	6.2	5.4	5.5	4.9	4.5	6.8	8.5	9.1	8.5	8.2	8.3	8.1	7.8	7.5	7.8	7.7	7.5	7.5	6.8	9.1	8.5	6.1	7.2
MEAN*	5.2	5.1	4.8	4.3	3.3	3.0	3.4	5.8	7.1	7.5	7.2	7.1	7.1	7.2	7.2	7.2	7.3	7.4	7.4	7.0	6.8	6.8	6.0	5.5	6.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 172

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1941 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JULY 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	260	270	240	250	270	280	270	250	290	310	340	360	350	370	360	320	250	260	300	340	300	290	290	240	294
2	230	240	230	220	240	280	270	240	300	310	370	370	400	360	300	370	330	250	250	260	270	240	230	220	283
3	220	230	220	220	240	250	280	240	310	350	390	410	q390b	370	400	360	330	250	280	280	290	300	260	230	296
4	210	230	290	240	270	280	250	240	330	300	340	410	380	400	380	320	340	270	290	340	340	320	320	280	307
5	230	220	230	230	280	q280b	280	270	q420	q690b	q660b	...b	...b	...b	...b	...b	q680b	450	340	380	460	q530	q660b	q720b	...
6	q780	q810	q800	q690b	q570b	q450b	330	260	350	340	350	330	360	320	330	350	300	260	280	370	320	270	270	270	407
7	260	270	270	260	260	330	290	250	290	400	360	380	520	430	520	380	370	260	280	270	230	220	230	230	315
8	240	250	230	220	260	290	260	250	300	350	360	q370b	380	410	400	420	350	250	280	250	230	230	230	230	293
9	220	240	260	250	250	240	260	240	300	330	370	370	390	490	420	370	370	260	280	260	230	230	230	240	296
10	240	280	250	210	260	270	280	240	300	320	360	380	370	530	380	390	400	250	260	230	230	230	230	230	297
11	240	270	300	270	290	310	290	250	310	340	330	370	410	390	350	q340c	340	240	280	330	290	250	220	220	301
12	220	230	270	270	310	370	270	260	330	310	330	430	410	390	460	440	330	260	280	340	320	270	220	250	315
13	230	230	240	260	260	270	290	240	310	340	380	470	410	390	490	350	320	230	250	250	260	230	220	240	298
14	230	220	230	240	240	230	260	240	280	...c	...c	...c	...c	...c	...c	460	360	240	250	230	240	230	220	230	...
15	230	220	220	240	250	270	270	240	330	340	380	420	400	400	380	370	310	260	290	350	310	255	230	220	300
16	250	230	230	240	250	220	240	240	300	320	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	310	360	390	460	400	420	340	320	240	240	270	240	220	220	220	...
18	220	220	220	220	240	270	280	240	320	360	410	420	410	390	480	400	370	240	260	240	250	210	260	240	299
19	230	220	230	240	220	230	260	230	270	280	380	390	380	500	450	340	340	240	250	240	230	200	230	230	284
20	240	270	250	230	260	270	280	230	320	380	440	460	440	390	390	360	320	250	270	300	300	300	280	240	311
21	230	240	220	230	250	290	300	260	310	360	400	410	400	390	450	340	320	260	280	290	280	290	240	270	305
22	280	260	250	220	220	230	280	240	310	350	350	370	380	380	400	340	340	250	280	290	270	230	230	240	291
23	220	250	240	230	220	240	270	250	280	320	260	450	420	460	410	370	320	250	270	270	260	230	220	230	293
24	240	220	230	230	220	230	290	250	300	330	390	450	400	500	400	430	370	250	280	260	220	210	220	230	298
25	230	240	230	230	300	320	290	250	300	340	330	420	370	360	430	350	350	260	270	300	290	250	240	230	299
26	240	230	240	245	235	240	250	255	320	420	360	460	370	460	390	350	370	245	275	240	250	230	240	230	298
27	240	240	240	240	230	230	280	230	300	400	390	420	410	360	390	340	300	240	240	280	280	260	230	230	292
28	230	230	220	230	230	260	270	260	300	350	350	420	460	410	430	430	350	250	250	260	230	220	220	220	295
29	220	220	230	260	240	230	270	230	340	370	390	430	460	380	350	400	370	240	280	330	290	250	250	230	303
30	220	230	...c	...c	...c	...c	...c	...c	...c	...c	360	370	420	450	400	420	330	240	275	280	275	230	220	230	...
31	230	240	230	240	230	240	270	250	320	320	350	420	390	400	430	400	350	250	300	290	240	230	210	225	294
MEAN*	252	258	260	254	262	273	275	246	312	353	377	405	405	406	407	386	350	256	274	287	274	255	252	251	305

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 173

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1941 JULY 1941

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.6	4.6	4.8	4.7	4.7	4.8	4.6	4.6	p4.5	...	...
2	...	...	4.5	4.6	4.8	4.7	5.0	4.7	4.5	4.8	4.6	...	...
3	...	...	4.6	4.6	4.7	4.8	p4.8b	4.7	4.7	4.8	4.6	...	...
4	...	...	4.5	4.5	4.6	4.8	4.7	4.8	4.8	4.7	4.6	...	...
5	...	...	4.3	3.9	4.0	4.2	4.2	4.1	4.0	4.0	3.9	...	...
6	...	...	4.5	4.5	4.5	4.7	4.9	4.7	4.6	4.5	4.3	...	...
7	...	...	4.6	4.7	4.5	4.6	4.7	4.5	4.8	4.5	4.6	...	...
8	...	...	4.4	4.6	4.6	p4.6b	4.7	4.8	4.7	4.6	4.5	...	...
9	...	...	4.5	4.5	4.7	4.7	4.6	4.7	4.5	4.5	4.6	...	...
10	...	...	4.6	4.6	4.6	4.6	4.7	4.8	4.5	4.6	4.5	...	...
11	...	...	4.5	4.6	4.5	4.7	4.7	4.7	4.5	p4.5c	4.4	...	...
12	...	...	4.4	4.3	4.4	4.6	4.6	4.5	4.6	4.7	4.2	...	...
13	...	...	4.4	4.5	4.6	4.5	4.5	4.5	4.5	4.2	4.4	...	...
14	...	...	4.5	...c	...c	...c	...c	...c	p4.5c	4.5	4.2	...	...
15	...	...	4.5	4.7	4.6	4.6	4.5	4.6	4.5	4.4	4.2	...	...
16	...	...	4.4	4.3	...c	...c	...c	...c	...c	...c	...c	...	...
17	...	...	p4.3c	4.3	4.5	4.7	4.7	4.6	4.7	4.4	4.3	...	...
18	...	...	4.4	4.5	4.6	4.6	4.6	4.6	4.8	4.5	4.4	...	...
19	...	...	4.3	4.4	4.6	4.6	4.6	5.0	4.9	4.5	4.4	...	...
20	...	...	4.3	4.5	4.7	4.6	4.7	4.6	4.6	4.8	4.3	...	...
21	...	...	4.4	4.5	4.6	4.8	4.8	4.8	4.9	4.5	4.8	...	...
22	...	...	4.6	4.7	4.6	4.8	4.7	4.8	4.7	4.5	4.3	...	...
23	...	...	4.3	4.7	4.8	4.9	4.9	4.9	4.8	4.5	4.3	...	...
24	...	...	4.6	4.7	4.8	4.9	4.8	5.0	4.8	4.8	4.6	...	...
25	...	...	4.7	4.7	4.8	5.0	4.8	4.8	4.8	4.5	4.4	...	...
26	...	...	4.5	5.0	4.8	4.9	4.7	4.8	4.8	4.6	4.5	...	...
27	...	...	4.5	4.7	4.8	4.9	4.8	4.7	4.9	4.5	4.3	...	...
28	...	...	4.6	4.8	4.7	5.0	4.8	4.8	4.9	4.8	4.8	...	...
29	...	...	4.8	4.8	5.1	5.0	5.0	4.8	4.7	4.7	4.6	...	...
30	...	...	p4.7c	p4.8c	4.9	4.9	5.0	5.1	4.9	5.0	4.5	...	...
31	...	...	4.9	4.8	4.9	5.0	5.0	5.0	5.0	4.8	4.6	...	...
* MEAN	...	...	4.5	4.6	4.7	4.7	4.7	4.7	4.7	4.6	4.4	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	210	200	210	200	210	200	240	...	...
2	...	...	220	200	200	210	230	200	210	200	230	...	...
3	...	...	220	210	210	210	p210b	210	210	210	220	...	...
4	...	...	230	210	220	210	210	210	200	210	230	...	...
5	...	...	p260	p250	p260	p240	p230	p230	p230	p240	p260	...	...
6	...	...	220	210	210	210	210	200	200	220	230	...	...
7	...	...	230	210	210	240	210	210	210	220	240	...	...
8	...	...	230	220	210	p220b	230	200	200	220	230	...	...
9	...	...	230	230	210	200	210	200	200	200	210	...	...
10	...	...	240	230	220	210	210	210	220	220	210	...	...
11	...	...	240	220	220	200	210	210	220	p220c	220	...	...
12	...	...	230	230	210	220	220	220	200	200	210	...	...
13	...	...	230	220	210	210	210	210	200	200	190	...	...
14	...	...	230	...c	...c	...c	...c	...c	200	200	210	...	...
15	...	...	230	220	230	210	200	210	200	200	210	...	...
16	...	...	230	220	...c	...c	...c	...c	...c	...c	...c	...	...
17	...	...	p230c	210	220	210	210	210	200	200	230	...	...
18	...	...	230	200	220	210	210	200	200	220	220	...	...
19	...	...	220	210	200	200	200	200	210	210	210	...	...
20	...	...	220	210	210	200	210	210	220	200	230	...	...
21	...	...	240	230	220	210	200	200	210	220	230	...	...
22	...	...	220	210	220	200	200	200	210	220	230	...	...
23	...	...	230	210	200	210	200	210	210	210	230	...	...
24	...	...	220	210	200	210	210	210	210	210	210	...	...
25	...	...	240	220	210	220	210	200	200	210	220	...	...
26	...	...	230	230	210	215	200	200	205	230	p240c	...	...
27	...	...	210	230	220	210	200	200	220	220	220	...	...
28	...	...	220	210	210	200	200	220	200	220	230	...	...
29	...	...	200	210	210	210	200	200	200	210	220	...	...
30	...	...	p210c	p220c	220	210	200	210	210	200	215	...	...
31	...	...	235	220	205	200	200	200	200	205	240	...	...
* MEAN	...	...	228	218	214	211	209	207	207	211	224	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 174

JULY 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1941

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.6	0.8	1.2	1.2	2.1	1.3	1.2	1.2	1.2	1.2	1.0	0.6	1.1	2.4	2.8	3.6	3.4	3.9	3.7	3.5	3.4	3.1	2.5	2.1	0.9
2	0.6	0.6	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.0	1.0	0.3	0.6	1.2	2.2	2.8	3.1	2.8	3.4	3.6	3.5	3.8	3.1	2.5	2.1	1.4
3	0.6	1.0	1.4	1.2	1.3	p3.0b	p2.9b	p2.8	2.6	1.9	1.3	1.1	1.0	1.1	2.2	2.8	2.8	3.5	p4.0b	p4.1b	p4.2b	3.9	3.3	2.7	1.9	1.0
4	0.8	0.8	1.2	1.2	1.3	1.8	1.7	1.8	1.8	2.0	1.0	0.9	0.6	1.2	2.1	2.2	3.0	3.8	3.6	3.9	3.5	3.4	3.4	2.8	2.0	1.1
5	1.2	0.9	1.0	1.0	1.1	1.1	1.0	1.0	0.9	1.0	1.0	0.8	0.6	1.8	2.1	2.5	2.8	3.0	3.1	3.3	3.4	3.0	2.8	2.4	2.0	2.0
6	0.6	0.6	0.8	0.9	1.1	1.2	1.2	1.3	1.2	1.2	1.1	0.6	0.6	1.4	2.2	2.6	2.8	2.7	3.3	3.4	3.3	3.2	3.0	2.2	2.0	1.1
7	0.5	0.6	1.1	1.1	1.2	1.2	1.2	1.2	1.0	0.9	1.0	0.6	0.6	1.2	2.2	2.6	2.8	3.3	3.8	3.6	4.5	3.3	3.0	2.5	2.1	1.0
8	0.6	0.9	1.0	1.1	1.2	p1.9b	p2.8b	-2.1	1.8	1.3	1.3	0.9	0.9	1.2	2.2	2.1	3.1	3.4	p3.6b	3.8	3.7	3.3	3.1	2.7	2.0	0.9
9	0.8	1.2	1.2	1.2	1.3	1.8	1.2	1.8	1.2	1.2	1.2	1.1	0.8	1.1	2.2	2.7	3.3	3.3	3.5	3.6	3.4	3.3	2.8	2.7	2.0	1.0
10	1.0	0.7	2.0	2.0	1.2	2.3	1.9	1.3	1.7	1.2	1.1	0.6	0.6	1.0	2.2	2.8	3.4	3.4	3.6	3.6	3.5	3.3	3.0	2.6	2.1	0.9
11	0.6	0.9	1.0	1.2	1.1	1.2	1.2	1.3	1.2	p1.1c	1.0	0.8	0.6	1.2	2.1	2.6	3.0	3.3	3.5	3.5	3.4	2.8	p2.7c	2.5	1.9	0.9
12	0.7	0.9	1.0	1.2	1.0	1.7	1.2	1.1	1.2	1.1	1.1	1.0	0.6	0.9	2.0	2.7	3.1	2.9	3.4	3.3	3.2	3.1	2.8	2.6	2.0	1.0
13	0.5	0.6	0.9	1.0	1.2	1.2	1.2	1.2	1.1	1.0	1.0	0.6	0.7	1.0	2.0	2.7	2.8	3.2	3.3	3.4	3.3	3.2	3.0	2.6	1.8	0.9
14	0.6	1.0	1.0	...c	...c	...c	...c	...c	1.2	1.0	0.9	0.9	0.6	1.0	2.2	2.6	...c	...c	...c	...c	...c	p3.2c	2.9	2.6	2.2	1.0
15	0.6	0.6	0.7	0.8	1.0	1.0	1.1	1.0	1.0	1.0	0.9	0.7	0.6	0.8	2.0	2.7	2.9	3.3	3.3	3.4	3.3	3.3	2.8	2.5	2.0	1.1
16	0.6	0.6	0.9	1.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.0	2.3	2.7	2.8	...c	...c	...c	...c	...c	...c	...c	...c	...c
17	...c	...c	...c	1.1	1.2	1.2	1.2	1.1	1.2	1.0	1.0	0.8	0.7	...c	...c	...c	3.0	3.3	3.7	3.5	3.5	3.3	2.9	2.3	2.0	1.9
18	0.6	0.6	0.8	1.0	1.2	1.2	1.1	1.1	1.2	1.1	1.0	0.8	0.7	1.1	2.2	2.7	3.0	3.4	3.6	3.3	3.6	3.5	3.1	2.5	2.0	0.7
19	0.8	0.8	0.9	1.2	1.1	1.1	1.8	1.2	1.7	1.2	1.0	1.0	1.0	1.2	2.2	2.7	3.2	3.3	3.7	3.8	3.7	3.5	3.0	3.1	2.2	1.8
20	0.6	0.8	1.0	1.1	1.2	1.2	1.3	2.0	1.2	1.2	1.0	1.0	0.7	1.0	2.1	2.8	3.1	3.5	3.8	3.7	4.0	3.4	3.0	2.4	2.1	0.9
21	0.7	0.7	0.8	1.1	1.2	1.2	1.2	1.2	1.1	1.2	1.0	0.8	0.6	1.1	2.1	2.6	2.8	3.4	3.5	3.7	3.8	3.4	3.1	1.9	2.2	1.1
22	0.7	0.6	0.9	1.0	1.2	1.3	1.3	1.2	1.2	1.2	1.2	1.0	0.8	1.1	2.2	2.6	3.0	3.2	3.2	3.2	3.2	3.2	3.0	2.6	2.2	1.1
23	0.9	0.9	1.2	1.1	2.0	1.9	1.2	1.9	1.8	1.2	1.2	1.0	0.9	1.4	2.3	2.9	3.2	3.3	3.2	3.2	3.2	3.2	3.2	2.6	2.2	1.2
24	0.9	1.1	1.2	1.2	1.2	1.3	1.8	1.7	1.3	1.2	1.2	0.9	0.7	2.3	2.8	3.0	3.2	3.7	3.8	3.8	3.8	3.8	3.2	p2.8c	2.2	1.2
25	0.6	0.9	1.0	1.1	1.3	1.9	1.8	1.3	1.4	1.1	1.1	0.8	1.0	1.3	2.3	2.9	3.2	3.4	3.7	3.8	3.9	3.8	3.3	2.8	2.2	1.0
26	0.6	0.8	0.8	1.1	1.8	1.2	1.9	1.9	1.9	2.2	2.4	1.0	0.7	1.2	2.3	2.8	3.2	3.8	3.8	3.9	3.9	3.8	3.8	3.1	2.2	1.0
27	0.6	0.7	1.0	1.1	2.0	1.9	2.0	1.9	1.4	1.2	1.0	0.8	0.6	1.2	2.4	2.7	3.0	3.7	3.9	4.0	3.8	3.8	3.2	2.2	2.1	1.2
28	0.8	0.8	1.0	1.2	1.2	1.3	1.2	1.9	1.8	1.3	1.0	0.8	0.6	1.2	2.1	2.5	3.2	3.5	3.8	3.9	4.1	3.8	3.3	2.8	2.2	1.2
29	0.8	0.6	0.8	1.2	1.3	2.8	2.9	1.4	1.8	1.1	1.1	1.0	0.8	1.2	2.3	2.5	3.2	3.8	3.8	4.0	3.8	3.8	3.3	2.9	2.3	1.2
30	...c	...c	...c	...c	1.4	2.0	2.0	1.8	1.8	1.2	1.0	0.8	0.6	...c	...c	...c	...c	3.8	4.0	3.9	3.8	3.8	3.3	2.9	2.3	1.2
31	0.8	0.8	1.0	1.2	1.3	1.9	1.8	2.0	1.4	1.4	1.1	0.9	0.7	1.2	2.4	3.0	3.5	3.8	3.9	4.2	4.0	3.9	3.3	2.9	2.3	1.1
* MEAN	0.7	0.8	1.0	1.1	1.3	1.6	1.6	1.5	1.4	1.2	1.1	0.9	0.7	1.2	2.2	2.7	3.1	3.4	3.6	3.7	3.6	3.5	3.1	2.6	2.1	1.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 175

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1941 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — AUGUST 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.5	5.1	5.1	4.7	2.9	2.9	3.2	6.5	8.2	8.3	7.8	7.8	8.6	8.5	8.8	8.7	8.5	8.5	8.0	7.4	7.0	7.3	8.2	6.9	6.9
2	7.4	6.7	5.8	6.2	6.2	5.6	2.9	6.5	8.0	8.2	8.0	8.6	9.0	9.4	9.5	9.2	8.7	8.3	8.6	8.0	7.9	7.8	7.2	7.0	7.5
3	7.0	6.3	7.6	5.8	4.8	4.2	4.4	6.1	7.5	8.0	8.3	8.1	8.0	8.3	8.2	9.2	8.4	8.0	7.4	6.7	6.4	5.9	5.5	5.6	6.9
4	5.9	p5.0	6.0	6.2	5.9	p5.5	6.0	8.0	9.3	8.9	8.6	8.7	8.4	8.7	9.0	9.2	9.0	9.0	8.9	8.6	7.0	6.7	6.8	7.4	7.6
5	6.6	6.7	6.3	4.9	4.5	4.4	3.4	6.8	8.4	9.2	9.3	10.4	9.7	9.0	9.3	9.0	8.5	7.5	7.2	6.9	6.4	6.7	7.0	6.5	7.3
6	6.6	6.6	6.0	4.2	3.2	2.6	3.3	6.2	8.6	...c	...c	...c	...c	...c	...c	...c	...c	9.0	9.6	8.0	5.7	6.3	6.7	6.7	...
7	6.5	4.9	4.1	4.1	3.6	3.5	3.9	6.6	7.9	8.6	8.4	8.3	8.8	8.6	p8.3c	8.0	7.5	7.5	7.4	6.6	6.5	7.0	6.5	6.3	6.6
8	5.5	5.2	5.3	4.9	4.5	4.3	4.4	7.4	8.6	8.9	8.2	7.8	7.4	7.5	7.7	7.9	8.3	8.3	9.2	8.5	8.0	7.8	7.3	7.2	7.1
9	7.2	5.9	4.7	4.2	3.4	3.2	3.8	6.3	8.4	9.2	8.3	7.7	7.5	7.0	7.2	7.4	7.5	7.3	8.0	7.8	6.6	6.4	6.1	7.0	6.6
10	6.5	6.3	5.9	4.3	3.5	2.3	3.5	6.7	7.4	8.9	7.5	7.2	6.8	7.2	7.6	8.3	8.1	8.5	9.1	8.0	7.0	7.2	8.7	7.2	6.8
11	7.0	5.1	4.3	3.6	3.2	3.1	3.4	6.3	7.3	9.1	9.2	8.3	8.6	8.1	8.0	8.3	8.2	7.8	7.8	7.3	7.2	6.2	7.4	7.8	6.8
12	7.4	6.5	6.5	5.0	4.8	3.8	3.7	6.3	7.8	8.7	8.8	8.3	8.0	7.8	7.9	8.1	7.9	7.7	7.7	7.4	7.5	7.4	p8.4	7.3	7.1
13	7.3	6.0	6.0	4.9	4.6	3.8	4.1	6.4	7.8	7.8	8.5	7.7	7.4	7.4	7.3	8.0	7.3	7.4	7.3	6.9	6.4	7.0	7.0	6.8	6.7
14	7.2	6.8	7.8	6.9	5.8	5.2	5.7	5.8	6.8	7.4	7.8	7.0	6.6	6.8	7.3	6.8	7.4	7.0	7.6	6.8	5.7	6.3	7.4	6.9	6.8
15	6.8	7.8	5.2	4.7	4.3	3.6	4.1	6.5	8.3	8.4	8.0	7.6	7.9	8.3	8.4	9.8	9.4	8.8	8.8	8.3	8.2	7.8	8.0	7.3	7.3
16	5.9	5.7	5.3	3.8	3.2	2.9	3.7	6.2	7.2	7.0	7.2	6.8	6.5	6.7	6.6	6.4	7.4	7.2	7.2	6.5	6.1	6.3	6.3	5.3	6.0
17	5.2	5.4	5.0	4.3	3.4	2.5	3.7	6.4	7.3	7.6	8.0	8.0	7.6	7.0	7.8	8.2	8.3	8.5	8.4	7.6	7.5	8.1	7.9	7.2	6.7
18	6.0	5.5	5.8	4.9	3.7	2.7	3.5	6.3	7.5	8.6	8.4	6.8	7.1	7.4	7.4	7.0	7.2	7.2	7.8	7.3	7.3	6.2	6.5	7.2	6.5
19	7.8	7.3	5.8	5.4	5.8	6.4	5.6	6.2	7.6	7.6	7.7	7.5	7.1	7.5	7.9	7.9	7.6	7.2	7.8	7.1	6.1	6.4	7.2	8.4	7.0
20	6.8	6.1	4.4	4.0	3.4	2.7	3.9	6.7	8.7	8.7	9.4	8.9	9.2	8.3	8.1	9.0	7.7	7.8	7.7	7.4	7.3	7.8	6.9	6.7	7.0
21	6.4	4.7	5.1	4.5	4.5	4.7	3.2	6.0	7.0	7.2	7.4	7.8	7.9	8.5	8.7	8.7	8.7	8.7	7.9	6.9	7.8	6.4	6.6	7.5	6.8
22	6.6	6.5	4.9	4.0	3.3	2.4	3.8	6.5	8.1	8.6	7.9	7.5	7.3	7.5	7.9	7.5	7.4	7.7	8.2	7.8	7.5	7.8	8.2	7.4	6.8
23	7.4	7.8	7.9	7.1	5.7	4.4	4.7	6.3	7.6	7.7	7.5	7.3	7.8	7.8	8.0	7.6	7.6	7.7	8.2	7.8	7.4	7.3	7.4	8.1	7.3
24	7.2	7.1	5.8	5.6	6.2	8.0	3.5	6.5	8.0	7.8	7.6	7.2	7.7	7.7	7.8	8.0	8.1	7.7	8.0	7.6	7.3	7.7	8.5	8.6	7.3
25	6.7	5.6	4.4	3.7	2.5	2.3	3.6	6.4	7.8	8.3	8.0	8.0	8.3	7.7	8.4	8.3	8.6	8.8	9.5	8.2	8.0	8.3	p9.2	p9.6	7.1
26	6.8	6.7	6.6	4.6	3.6	3.6	4.3	7.2	8.8	9.7	9.4	9.3	8.7	8.8	9.4	9.4	9.5	9.8	10.0	p8.3	p8.9	9.2	p10.6	7.4	7.9
27	p8.0	5.6	6.1	5.1	6.5	4.7	5.9	8.3	9.4	10.5	10.7	10.4	9.2	8.8	8.0	8.5	8.8	9.7	9.6	9.7	8.7	9.0	9.0	7.7	8.2
28	7.0	7.4	7.1	6.4	5.6	5.4	5.8	7.1	7.8	8.0	8.2	7.0	6.7	6.7	6.7	7.2	7.6	8.2	9.0	8.5	8.3	7.9	7.4	7.7	7.3
29	7.5	7.1	6.4	5.5	4.7	3.8	4.9	7.8	8.7	8.7	8.4	8.2	8.8	8.2	8.0	8.4	8.6	9.7	9.9	9.1	8.4	8.4	8.3	8.6	7.8
30	7.0	7.0	6.7	5.3	5.0	4.8	4.7	7.4	9.0	9.7	9.6	8.9	8.4	8.1	8.0	7.9	7.5	8.1	8.9	8.6	8.6	8.2	8.1	7.0	7.6
31	7.2	6.8	6.4	5.8	5.6	4.7	3.6	6.7	8.8	9.1	9.6	9.2	8.5	8.3	8.2	8.3	8.4	8.4	8.2	7.7	7.3	6.6	7.0	8.0	7.4
* MEAN	6.8	6.2	5.8	5.0	4.4	4.0	4.1	6.7	8.0	8.5	8.4	8.1	8.0	7.9	8.0	8.2	8.1	8.2	8.4	7.7	7.3	7.3	7.5	7.3	7.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 176

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1941 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS AUGUST 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	230	220	220	240	300	280	250	330	300	350	350	380	410	370	340	300	250	290	250	260	240	230	230	285
2	220	220	250	270	260	340	300	240	300	340	330	380	360	400	360	360	240	260	280	280	260	220	220	220	288
3	220	230	220	220	240	260	300	260	300	300	330	370	370	390	380	390	350	270	290	370	340	350	230	260	302
4	240	260	200	240	280	290	240	250	270	320	320	340	360	390	420	350	310	270	300	360	420	370	280	230	305
5	240	240	280	310	310	300	300	260	280	330	350	390	350	340	360	350	240	260	300	300	270	220	230	230	293
6	240	230	230	230	240	260	300	250	320	...c	...c	...c	...c	...c	...c	...c	...c	270	280	410	400	430	230	230	...
7	230	240	250	250	260	280	290	250	300	330	340	380	410	340	q350c	360	350	260	300	340	330	250	240	240	299
8	240	250	250	240	240	260	260	240	300	300	360	420	390	440	420	380	330	260	260	300	280	270	240	230	298
9	220	220	230	240	260	270	300	250	320	320	360	390	410	480	460	400	330	250	290	330	340	300	270	220	311
10	220	220	220	240	240	250	260	230	320	350	390	430	420	430	450	400	340	260	280	290	290	280	240	240	304
11	240	240	240	230	280	330	270	240	300	330	370	360	390	380	350	360	360	250	280	300	300	270	280	240	300
12	230	230	230	230	240	260	280	260	300	330	330	360	440	390	400	380	390	270	280	300	290	260	230	230	298
13	220	220	230	260	270	270	280	240	320	340	390	390	400	380	440	380	360	250	280	320	290	270	240	230	303
14	230	230	240	260	270	260	290	240	320	320	380	530	400	350	410	350	360	250	280	350	350	260	230	240	308
15	230	220	230	260	250	230	280	240	280	350	380	360	380	370	370	340	300	240	270	270	280	240	220	230	284
16	230	230	210	230	260	260	270	250	300	380	380	430	470	400	380	380	430	240	270	280	280	270	230	230	304
17	220	230	220	240	240	240	260	270	290	340	330	350	360	400	400	360	300	260	280	290	260	240	230	220	285
18	230	230	230	230	240	240	260	250	q280	320	350	410	420	430	400	360	320	250	270	290	280	250	230	230	292
19	220	230	250	280	280	280	290	250	300	350	370	400	390	400	390	350	320	250	280	370	340	300	240	210	306
20	230	220	230	240	240	260	280	240	290	290	320	370	350	410	390	340	300	250	290	330	290	240	240	220	286
21	230	230	240	240	280	300	280	240	280	370	370	380	390	390	370	360	350	260	270	280	230	210	210	240	292
22	200	210	220	230	240	270	280	240	320	330	350	400	380	380	370	360	340	260	280	270	280	280	210	240	289
23	230	230	230	200	210	270	290	240	340	270	360	430	400	390	350	350	320	270	270	300	270	230	240	230	288
24	240	230	230	260	270	280	280	250	320	350	410	350	410	440	360	370	390	250	290	300	240	220	220	220	299
25	200	220	270	230	270	320	280	250	310	350	360	370	380	360	430	340	320	240	280	380	330	280	240	210	301
26	230	230	230	250	240	260	270	260	290	320	340	370	380	350	350	340	300	270	300	420	440	300	230	220	300
27	230	260	270	280	310	310	270	250	280	300	320	350	350	380	320	340	300	240	290	300	290	230	220	230	288
28	250	270	240	240	280	250	270	250	330	370	420	400	440	480	420	390	320	240	280	330	280	240	230	220	310
29	230	240	230	260	250	240	270	240	300	350	330	350	380	330	400	300	330	250	270	310	330	260	220	220	287
30	250	240	260	280	310	290	270	240	300	340	350	380	350	390	390	350	290	250	280	290	250	230	220	220	293
31	220	230	230	260	300	270	280	240	300	300	350	380	380	390	350	320	290	280	280	340	310	240	280	240	294
MEAN*	228	233	236	247	261	274	278	247	303	330	356	386	390	394	387	358	326	256	282	318	303	266	236	229	297

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 177

AUGUST 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1941

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.8	4.9	4.8	4.9	5.0	4.7	4.9	4.6	4.5	...	...
2	...	...	4.5	4.9	4.8	5.2	5.0	5.0	4.8	4.5	...	...	...
3	...	...	4.6	4.7	4.9	4.9	5.0	4.9	4.8	4.7	4.6	...	...
4	...	...	4.5	4.8	4.8	5.1	5.0	5.1	5.4	4.6	4.5	...	...
5	...	...	4.6	5.0	4.9	4.9	4.9	4.8	4.8	4.8	4.7	...	...
6	...	...	4.7	...c	...c	...c	...c	...c	...c	...c	...c	...	...
7	...	...	4.8	5.0	4.9	5.0	5.1	4.9	p4.8c	4.8	4.6	...	...
8	...	...	4.6	4.8	4.9	5.0	5.0	4.8	4.8	4.7	4.6	...	...
9	...	...	4.7	4.7	4.7	4.8	5.0	5.0	5.0	4.7	4.6	...	...
10	...	...	4.5	4.8	4.9	4.9	4.8	4.7	4.8	4.7	4.6	...	...
11	...	...	4.5	4.6	4.7	4.8	4.8	4.7	4.6	4.5	4.5	...	...
12	...	...	4.5	4.7	4.7	4.7	4.9	4.8	4.8	4.7	4.8	...	...
13	...	...	4.5	4.6	4.8	4.7	4.8	4.7	4.7	4.7	4.5	...	...
14	...	...	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.5	4.5	...	...
15	...	...	4.5	4.8	4.9	4.7	4.7	4.8	4.6	4.6	4.4	...	...
16	...	...	4.5	4.8	4.6	4.8	4.8	4.6	4.6	4.5	4.5	...	...
17	...	...	4.5	4.5	4.7	4.7	4.7	4.8	4.6	4.6	4.3	...	...
18	...	...	...	4.8	4.7	4.9	4.8	4.8	4.8	4.6	4.5	...	...
19	...	...	4.5	4.7	4.7	4.9	4.8	4.8	4.8	4.6	4.6	...	...
20	...	...	4.7	4.8	4.8	p4.8b	4.8	4.9	4.8	4.5	4.4	...	...
21	...	...	4.8	4.8	4.8	4.9	5.0	5.0	4.8	5.0	4.8	...	...
22	...	...	4.8	4.8	4.8	4.9	4.9	5.0	4.7	4.7	4.5	...	...
23	...	...	4.7	4.7	4.8	5.0	4.8	4.8	4.7	4.7	4.5	...	...
24	...	...	4.8	4.9	5.0	4.9	5.0	5.2	4.7	4.8	4.9	...	...
25	...	...	4.7	4.9	4.9	4.9	5.0	4.9	5.0	4.8	4.5	...	...
26	...	...	4.8	4.8	4.8	5.1	5.1	4.9	4.8	4.8	4.5	...	...
27	...	...	4.7	4.9	4.8	5.1	5.0	5.0	4.8	4.8	4.5	...	...
28	...	...	4.8	4.8	4.9	4.8	5.0	5.2	5.0	4.8	4.6	...	...
29	...	...	4.7	4.9	4.8	5.0	5.0	4.8	5.0	4.5	4.4	...	...
30	...	...	4.8	4.9	4.9	5.1	5.0	4.8	4.9	4.7	4.4	...	...
31	...	...	4.9	4.8	5.1	4.9	5.0	4.9	4.8	4.4	4.0	...	...
MEAN*	...	...	4.6	4.8	4.8	4.9	4.9	4.9	4.8	4.7	4.5	...	...

MINIMUM VIRTUAL HEIGHT OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	220	225	220	215	200	200	210	210	240	...	...
2	...	...	250	230	220	210	210	220	210	230	...	...	...
3	...	...	240	220	210	210	220	220	220	225	220	...	...
4	...	...	230	230	230	225	220	210	230	230	250	...	...
5	...	...	230	230	230	220	220	210	220	210	...	...	...
6	...	...	240	...c	...c	...c	...c	...c	...c	...c	...c	...	...
7	...	...	230	230	230	220	220	210	p210c	210	220	...	...
8	...	...	220	230	220	230	220	210	210	210	220	...	...
9	...	...	230	230	210	220	210	210	200	220	230	...	...
10	...	...	230	225	210	210	205	210	190	210	240	...	...
11	...	...	240	220	220	210	210	200	210	210	220	...	...
12	...	...	270	230	220	220	p210c	210	210	210	230	...	...
13	...	...	240	220	220	220	210	210	210	210	230	...	...
14	...	...	220	220	220	210	210	210	220	220	220	...	...
15	...	...	220	220	220	210	210	200	210	210	210	...	...
16	...	...	230	220	210	200	200	200	200	200	210	...	...
17	...	...	220	210	220	200	200	190	190	200	210	...	...
18	...	...	220	230	220	200	200	220	210	210	220	...	...
19	...	...	230	210	230	200	200	230	220	230	220	...	...
20	...	...	230	200	200	p220b	230	210	220	210	200	...	...
21	...	...	230	230	220	210	200	200	210	220	230	...	...
22	...	...	230	230	220	220	210	200	200	210	200	...	...
23	...	...	220	230	210	220	210	210	210	210	200	...	...
24	...	...	230	210	230	210	200	200	220	200	220	...	...
25	...	...	230	230	220	220	220	210	220	220	220	...	...
26	...	...	240	230	230	210	220	220	220	220	220	...	...
27	...	...	240	230	230	220	220	200	200	210	230	...	...
28	...	...	240	230	230	210	210	200	210	220	240	...	...
29	...	...	230	240	220	210	200	210	220	230	220	...	...
30	...	...	240	230	220	220	210	200	210	220	230	...	...
31	...	...	240	220	220	210	210	210	210	210	210	...	...
MEAN*	...	...	233	225	220	214	210	208	211	214	222	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 178

AUGUST 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1941

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.6	1.0	1.2	1.7	1.8	1.8	1.5	1.4	1.2	1.0	0.9	0.6	1.2	2.4	2.7	3.4	3.5	3.6	3.8	3.6	3.4	3.0	3.1	2.5	1.2
2	0.5	0.6	1.0	1.1	1.1	1.2	1.2	1.8	1.7	1.4	1.0	0.9	0.6	1.3	1.7	3.0	3.2	3.5	3.7	3.7	3.8	3.5	3.3	2.5	2.3	1.3
3	0.6	0.7	1.0	1.1	1.0	1.8	1.7	1.7	1.2	1.2	1.1	1.0	0.6	1.2	2.4	2.9	3.3	3.6	3.8	4.0	3.7	3.5	3.2	2.9	2.2	1.1
4	0.8	0.8	1.0	1.0	1.2	1.2	1.3	1.1	1.2	1.1	1.2	0.9	0.7	1.2	2.4	2.6	3.2	3.7	3.7	3.7	3.8	3.4	2.9	2.8	2.2	1.2
5	0.6	0.9	1.1	1.2	1.4	1.8	1.6	1.4	1.2	1.2	1.1	1.0	0.6	1.2	2.3	2.8	3.2	3.4	3.5	3.8	3.9	3.4	3.2	2.8	2.3	1.1
6	0.5	0.6	0.9	...c	...c	...c	...c	...c	...c	...c	...c	0.6	0.8	1.1	2.3	2.8	...c	...c	...c	...c	...c	...c	...c	...c	2.7	1.3
7	0.6	0.8	0.9	1.0	1.1	1.1	1.2	1.2	p1.2c	1.2	1.0	0.8	0.6	1.3	2.4	2.8	3.2	3.6	3.7	3.8	3.8	p3.5c	3.2	2.7	2.2	1.1
8	0.6	0.6	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.2	1.1	1.0	0.6	1.2	2.2	2.7	3.2	3.5	3.5	3.7	3.6	3.4	3.2	2.7	2.3	1.0
9	0.6	0.9	0.8	1.1	1.2	1.8	1.1	1.1	1.1	1.2	1.1	0.8	0.6	1.1	2.2	2.6	2.9	3.5	3.8	3.8	3.8	3.5	3.2	2.5	2.2	0.9
10	0.8	1.0	1.2	1.2	1.8	1.8	1.7	1.8	1.3	1.1	1.0	0.8	0.6	1.1	2.3	2.6	3.2	3.7	3.5	3.6	3.6	3.6	3.2	2.7	2.1	1.2
11	0.8	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.0	0.8	0.8	1.2	2.4	2.8	3.1	3.4	3.6	3.6	3.5	3.5	3.1	2.7	2.1	1.0
12	0.6	0.6	0.9	1.1	2.0	1.8	p2.0	1.2	1.2	1.1	1.0	0.8	0.6	1.1	2.1	2.8	3.2	3.6	4.0	3.8	3.7	3.3	3.1	3.8	2.1	1.0
13	0.9	0.8	1.7	0.9	1.4	1.1	1.2	1.3	1.2	1.2	0.9	0.8	0.6	1.2	2.3	3.0	3.2	3.5	3.7	3.8	3.6	3.4	3.1	2.7	2.2	1.0
14	0.6	0.8	1.0	1.2	1.2	1.3	1.3	1.2	1.2	1.1	1.1	0.9	0.6	1.2	2.3	2.8	3.1	3.4	3.8	3.9	3.6	3.4	3.1	2.8	2.1	1.2
15	0.6	0.9	0.6	1.2	1.2	1.2	1.3	1.4	1.9	1.2	1.0	0.8	0.8	1.2	2.3	2.9	3.2	3.7	3.8	3.8	3.9	3.8	3.0	2.7	2.2	1.2
16	0.6	0.9	1.1	1.2	1.4	1.8	1.9	1.8	1.3	1.2	1.1	0.9	0.7	1.3	2.3	2.8	3.3	3.7	4.1	3.9	3.8	3.7	3.1	2.8	2.4	0.9
17	0.8	0.9	1.2	1.9	1.9	2.0	1.9	1.8	1.4	1.2	1.1	1.0	0.8	1.2	2.4	2.8	3.2	3.9	4.0	4.0	3.9	3.8	3.2	2.8	2.2	1.0
18	0.8	1.1	1.1	1.2	2.0	1.8	1.7	1.7	1.7	1.3	1.1	1.0	0.7	1.3	2.3	3.1	3.8	3.9	4.0	4.1	4.1	3.7	3.2	2.7	2.2	1.1
19	0.8	0.8	1.1	1.1	1.8	1.9	1.9	2.1	2.0	1.8	1.5	1.0	0.8	1.5	2.1	2.8	3.2	3.5	3.9	4.0	4.1	3.8	3.4	2.4	2.2	1.2
20	0.6	0.8	1.0	1.2	1.8	1.9	1.3	1.2	1.2	1.1	1.0	0.9	0.8	1.4	2.4	2.8	3.5	3.6	p4.9b	4.3	4.0	3.8	3.2	2.8	2.3	1.1
21	0.6	0.7	1.4	1.2	1.8	1.9	2.0	2.0	1.9	1.2	1.1	1.0	0.6	1.4	1.9	3.0	3.3	3.6	3.8	4.0	3.7	3.8	3.2	2.8	2.3	1.2
22	0.6	0.8	1.0	1.1	1.2	1.2	1.3	1.4	1.3	1.2	1.1	0.9	1.2	1.2	2.2	2.5	3.2	3.6	3.7	3.7	3.8	3.6	3.2	2.8	2.2	1.2
23	0.6	0.9	0.9	1.2	1.8	1.7	1.7	1.2	1.3	1.2	1.1	0.9	0.8	1.1	2.4	2.8	3.3	3.7	3.7	3.8	3.8	3.5	3.2	2.9	2.3	1.2
24	0.6	1.0	1.1	1.2	1.3	1.4	1.3	1.3	1.2	1.8	1.0	0.9	0.9	1.3	2.4	3.0	3.3	3.6	3.6	3.9	3.8	3.5	3.2	2.8	2.3	1.2
25	0.6	0.6	0.8	1.0	1.1	1.3	1.2	1.2	1.1	1.2	1.1	0.9	0.8	1.5	2.3	2.7	3.2	3.5	3.8	3.7	3.7	3.5	3.1	2.7	2.1	1.2
26	0.6	0.6	1.0	1.1	1.2	1.2	1.3	1.2	1.2	1.2	1.0	0.6	0.6	1.5	2.5	2.8	3.3	3.6	3.7	3.8	3.8	3.6	3.2	2.8	2.2	1.2
27	0.6	0.8	1.0	1.2	1.0	1.8	1.8	1.7	1.3	1.1	1.0	0.8	0.6	1.5	2.4	3.0	3.4	3.5	3.6	3.7	3.5	3.5	3.2	2.8	2.2	1.2
28	0.6	0.7	1.0	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.1	0.9	0.6	1.4	2.4	2.2	3.2	3.5	3.8	3.8	3.7	3.5	3.3	3.0	2.3	1.4
29	0.6	0.8	0.9	1.1	1.3	2.0	1.7	1.1	1.3	1.1	1.0	0.8	0.5	1.5	2.3	2.7	3.2	3.5	3.6	3.8	3.6	3.5	3.1	2.7	2.3	1.3
30	0.6	0.6	1.0	1.2	1.2	1.1	1.3	1.2	1.2	1.2	1.0	0.9	0.6	1.4	2.5	3.0	3.3	3.5	3.6	3.8	3.5	3.6	3.3	2.6	2.1	1.0
31	0.8	0.6	1.0	1.1	1.1	1.3	1.9	1.9	1.9	1.5	1.1	1.1	0.8	1.5	2.5	3.0	3.3	3.5	3.7	3.8	3.5	3.6	3.2	2.8	2.4	1.1
* MEAN	0.6	0.8	1.0	1.2	1.4	1.5	1.5	1.4	1.4	1.2	1.1	0.9	0.7	1.3	2.3	2.8	3.3	3.6	3.8	3.8	3.7	3.6	3.2	2.8	2.2	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 179

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1941 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — SEPTEMBER 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	8.2	8.3	8.2	8.0	7.4	7.9	6.9	8.7	9.2	9.2	7.7	8.2	7.5	7.3	7.5	7.8	7.9	7.8	7.7	7.0	7.0	6.4	6.6	6.3	7.7
2	5.6	5.8	4.7	4.6	4.3	p4.2	4.2	6.8	8.0	8.8	8.2	8.3	8.1	8.2	8.2	8.2	8.6	8.3	8.1	6.3	p6.2f	6.2	6.8	8.1	6.9
3	7.4	7.4	7.0	6.7	5.5	4.8	5.1	8.0	8.8	9.4	8.4	7.6	7.1	7.3	7.8	8.0	8.2	8.3	8.6	7.9	7.8	8.2	8.2	8.0	7.6
4	7.1	6.5	5.6	5.1	4.9	4.7	5.6	7.5	8.4	8.4	7.2	6.9	p7.1c	p7.4c	p7.6c	p7.9c	8.1	8.0	8.0	7.5	7.0	8.5	7.8	6.6	7.1
5	6.2	5.8	4.8	4.7	4.7	4.5	4.1	7.0	8.4	8.0	7.8	7.4	7.3	7.5	8.0	7.8	8.0	7.6	8.0	6.4	p5.8	p6.8	6.5	7.4	6.7
6	7.3	6.2	5.1	4.3	3.8	3.2	4.9	7.0	7.8	8.4	7.3	7.1	7.1	7.3	7.5	7.8	8.0	8.3	7.6	p6.5f	6.7	7.0	7.5	7.5	6.7
7	6.3	6.2	4.2	4.0	4.0	3.1	4.4	7.1	8.7	8.2	7.8	8.4	8.3	9.1	9.6	9.4	9.0	9.4	10.7	10.7	10.0	9.6	9.9	9.3	7.8
8	8.0	7.0	6.4	5.5	5.1	5.0	4.6	7.2	8.4	8.2	7.7	7.5	8.4	p8.6c	8.8	8.2	p8.0c	7.9	8.3	7.3	7.0	7.6	p7.5a	7.4	7.3
9	7.4	6.8	5.8	4.9	4.5	3.8	5.0	7.6	8.7	8.4	8.4	p8.2c	p8.1c	8.0	8.3	p9.0c	p8.7c	7.8	6.8	6.2	6.6	7.5	7.7	7.7	7.2
10	7.6	5.6	5.0	4.9	4.6	4.2	5.3	7.7	8.8	9.2	9.3	8.7	8.4	8.4	8.9	8.8	8.8	8.4	8.3	7.5	6.4	p6.6f	p6.8f	7.0	7.3
11	5.8	5.2	4.5	4.2	4.1	3.7	4.9	7.6	8.8	10.2	10.2	9.5	10.1	8.6	8.3	8.1	8.4	8.4	8.4	7.4	6.3	6.4	6.6	6.6	7.2
12	6.9	7.2	6.1	5.3	4.1	3.5	5.3	7.9	9.3	9.2	9.1	8.5	8.4	8.8	8.6	8.6	8.6	8.4	8.7	p6.8f	p7.5f	p7.4f	p7.2f	p7.0f	7.4
13	p6.8f	6.7	5.0	3.8	3.0	2.5	5.0	7.5	9.1	9.4	9.0	10.1	10.8	11.8	10.3	9.6	8.4	8.1	8.0	8.2	7.9	8.4	8.9	7.9	7.8
14	7.8	7.7	6.9	6.6	6.5	p5.5f	4.5	7.9	9.3	10.2	10.1	10.2	10.3	9.9	10.2	10.3	9.7	9.4	9.3	8.6	8.7	9.6	10.5	8.0	8.7
15	6.0	4.9	4.3	3.9	3.9	p3.5f	5.5	8.3	9.7	10.5	11.2	10.7	10.3	10.4	10.0	9.6	9.5	10.0	10.3	9.6	8.3	p8.9f	9.5	8.8	8.2
16	9.6	7.8	6.5	6.6	6.6	6.0	5.0	8.4	10.0	10.9	10.0	9.8	9.7	9.5	10.0	9.8	9.9	9.6	9.0	7.3	7.5	p7.9f	8.0	8.8	8.5
17	8.4	6.6	5.6	4.7	p4.5f	p4.5f	p5.5f	7.5	9.2	10.2	10.8	10.4	10.4	9.6	9.4	9.5	9.4	8.8	8.4	7.2	6.9	7.0	6.5	6.3	7.8
18	5.7	4.8	4.5	4.1	2.5	2.0	5.2	6.8	9.2	11.2	8.7	10.1	9.7	10.0	8.8	8.0	8.0	8.9	9.6	8.2	8.4	8.1	7.2	6.8	7.4
19	4.5	p5.0b	6.5	p4.0b	p2.6b	p1.2b	6.2	11.6	12.7	12.6	12.8	13.2	13.0	12.9	12.0	11.4	10.5	10.9	9.8	9.5	8.3	8.0	9.4	10.2	9.1
20	8.9	7.7	8.0	9.6	6.7	2.6	5.4	8.6	9.8	9.5	9.6	8.3	8.1	8.3	8.4	8.8	8.9	9.6	9.7	8.7	8.3	8.3	8.2	p8.0f	8.2
21	p7.9f	p7.8f	p7.6f	5.8	5.0	5.1	7.0	9.1	9.6	8.7	8.3	7.3	8.1	8.5	8.6	8.2	8.1	8.4	8.8	8.2	8.0	p7.8f	p7.0f	p6.7f	7.7
22	6.2	5.6	4.9	4.2	4.1	3.8	6.2	8.3	10.0	10.2	9.6	8.6	8.7	8.1	7.9	8.7	9.2	9.6	9.6	8.4	8.0	p8.2f	p8.5f	p8.5	7.7
23	8.0	5.7	4.2	3.4	3.0	2.9	5.8	8.4	9.4	9.3	8.2	7.7	8.2	8.5	9.4	10.0	9.8	9.7	9.4	9.0	8.5	8.8	8.8	9.3	7.7
24	9.3	9.0	8.4	8.2	7.0	6.6	5.3	8.0	10.2	9.5	9.0	8.3	8.1	8.2	8.3	8.5	8.9	9.4	9.2	8.0	7.4	9.3	9.0	8.2	8.4
25	8.3	5.3	4.1	3.8	3.6	3.5	5.9	8.6	10.1	10.7	11.4	11.7	10.6	10.2	10.5	10.2	10.3	10.7	10.5	9.8	9.2	8.9	8.2	7.5	8.5
26	7.5	7.2	6.4	6.1	5.6	5.1	7.1	9.0	10.6	11.2	11.5	10.7	9.2	8.9	8.8	8.7	9.0	9.0	9.2	8.3	7.7	7.5	10.0	10.2	8.5
27	9.6	8.8	6.7	5.7	5.8	p5.4f	5.0	7.8	9.8	10.2	9.7	9.4	9.4	9.2	9.6	10.3	10.6	10.5	10.1	8.5	8.3	7.9	7.8	7.5	8.5
28	7.4	6.5	6.4	6.5	5.6	p5.6f	5.5	8.1	9.9	10.2	10.5	9.2	9.1	8.8	8.7	8.7	9.1	9.0	9.0	8.6	7.9	7.6	7.1	p7.3f	8.0
29	7.5	6.7	5.7	5.5	5.4	4.3	6.7	10.0	11.3	11.9	11.4	11.5	11.2	9.6	p10.4c	p10.0c	9.7	10.0	p8.7c	p8.7c	p8.5c	8.3	p8.4c	p8.5c	8.7
30	7.7	7.2	6.6	6.7	5.5	5.3	6.7	p8.6c	p8.6c	p9.5c	p9.0c	p8.6c	p8.5c	p8.4c	8.4	8.5	9.0	8.8	8.7	8.4	8.2	8.2	8.6	8.7	8.0
31																									
MEAN*	7.4	6.6	5.9	5.4	4.8	4.3	5.5	8.1	9.4	9.7	9.3	9.1	9.0	8.9	9.0	9.0	8.9	9.0	8.9	8.0	7.7	7.9	8.0	7.9	7.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 180

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1941 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — SEPTEMBER 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	320	260	240	250	240	270	270	240	290	390	340	390	400	440	380	370	350	250	280	300	310	210	240	210	302
2	220	220	230	260	290	330	260	250	310	320	350	390	370	400	340	360	360	270	270	410	320	280	220	220	302
3	230	220	240	250	260	270	270	250	310	340	370	380	460	420	370	350	320	250	290	320	310	230	220	210	298
4	230	230	250	250	270	270	260	200	300	350	360	410	q400c	q390c	q370c	q350c	340	260	290	330	320	230	220	210	296
5	220	230	260	270	300	310	280	280	310	350	380	400	440	410	390	340	310	250	290	340	290	280	220	200	306
6	210	190	230	230	240	230	260	230	320	350	370	410	430	430	390	380	350	260	310	340	360	360	240	220	306
7	230	230	250	250	310	330	260	240	300	330	340	390	380	370	320	360	330	260	260	270	270	260	240	220	292
8	220	220	240	240	260	240	270	260	300	340	370	400	400	q390c	370	370	q320c	260	290	240	320	280	q250f	230	295
9	230	230	230	260	260	260	260	300	310	360	360	q370c	q390c	400	370	q360c	350	260	280	360	340	250	210	220	301
10	220	230	230	240	250	250	270	280	300	350	350	370	370	390	360	340	310	260	290	350	320	q280f	230	230	295
11	230	230	260	250	260	260	270	250	300	310	320	390	390	370	360	360	340	250	280	370	340	280	240	240	298
12	220	220	230	230	250	270	270	270	300	350	360	370	390	390	360	350	320	250	290	380	390	230	240	230	298
13	220	210	240	230	250	260	250	270	310	280	350	330	350	350	330	350	320	270	270	280	280	260	240	240	281
14	240	260	250	280	300	290	270	290	330	310	340	360	380	380	360	340	300	250	290	290	260	240	220	210	293
15	220	230	250	300	330	320	270	240	320	310	320	340	360	380	340	350	230	250	280	340	400	260	230	250	297
16	250	270	290	270	290	280	270	240	310	320	320	350	400	380	370	350	330	260	300	420	370	340	290	220	312
17	230	230	230	240	260	270	270	250	320	330	360	340	370	310	340	330	320	280	300	380	350	370	320	240	302
18	210	250	230	210	310	260	260	260	270	270	300	320	330	320	330	360	280	280	330	430	350	390	450	370	307
19	480	690	520	q690b	q790b	q530b	320	270	320	340	330	320	340	360	350	340	290	280	290	300	290	310	260	240	385
20	260	290	290	240	220	220	270	270	310	350	370	370	460	390	360	380	330	260	290	300	330	300	210	260	305
21	320	240	230	230	270	250	270	270	300	360	400	420	410	370	450	380	330	270	290	380	370	q320f	260	230	318
22	240	250	270	250	250	240	270	260	300	330	350	380	390	400	380	370	310	260	300	310	320	310	240	220	300
23	210	260	250	250	270	290	270	270	330	360	400	390	370	380	390	340	310	280	300	390	350	300	230	230	309
24	230	230	260	300	360	360	260	300	310	320	350	380	380	360	370	310	300	270	320	380	320	220	230	230	306
25	230	240	250	280	240	280	260	270	300	300	360	350	380	370	350	300	290	270	290	350	320	280	310	300	299
26	260	240	260	260	270	280	270	270	290	300	360	350	340	350	330	330	300	270	280	380	300	350	200	220	294
27	240	220	250	270	290	300	270	250	310	320	350	380	350	350	350	320	290	260	300	420	380	350	290	260	307
28	250	270	260	260	310	330	280	290	310	330	370	350	370	350	370	350	300	260	290	360	380	260	310	230	310
29	230	260	260	280	300	270	270	270	280	300	340	360	350	360	340	300	230	270	280	330	320	250	260	230	289
30	250	260	280	270	320	310	270	270	q270c	q320c	q350c	q320c	q350c	q330c	350	310	310	270	290	390	380	240	230	230	299
31																									
MEAN*	245	254	259	270	294	288	269	262	305	330	353	369	383	376	361	347	312	263	290	348	332	284	252	235	303

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 181

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.6	5.1	4.9	5.0	5.0	5.0	4.7	4.7	4.5	...	...
2	...	...	4.7	4.9	4.8	5.0	5.0	4.9	4.8	4.7	4.8	...	...
3	...	...	4.8	4.8	4.9	4.8	5.0	4.8	4.6	4.7	4.4	...	...
4	...	4.3	4.6	4.7	4.7	4.8	p4.9c	p4.9c	p4.8c	p4.8c	4.7	...	...
5	...	4.4	4.7	4.8	4.8	5.0	5.0	5.0	4.7	4.5	4.5	...	...
6	...	...	4.7	4.8	4.8	4.9	4.8	4.7	4.7	4.8	4.7	...	...
7	...	...	4.6	4.7	4.8	5.0	4.8	4.8	4.8	4.8	4.6	...	...
8	...	...	4.5	4.7	4.8	4.9	4.9	p4.8c	4.7	4.8	p4.7c	...	...
9	...	4.2	4.5	4.7	4.8	p4.9c	p4.8c	4.7	4.7	p4.7c	4.8	...	...
10	...	4.3	4.6	4.8	4.8	4.8	4.8	4.8	4.7	4.5	4.3	...	...
11	...	...	4.6	4.7	4.7	5.0	4.8	4.8	4.7	4.8	4.6	...	...
12	...	4.0	4.7	4.9	4.9	5.0	5.1	5.0	4.8	4.8	4.6	...	...
13	...	4.3	4.7	4.8	5.0	5.0	5.0	4.9	4.8	4.8	4.3	...	...
14	...	4.4	4.8	4.7	5.0	4.9	4.7	5.0	4.8	4.7	4.3	...	...
15	...	...	4.7	4.9	4.8	5.0	5.0	4.9	4.8	4.6	p4.4	...	...
16	...	4.3	4.6	5.0	4.9	5.0	5.0	4.9	5.0	4.8	4.5	...	...
17	...	...	4.6	4.9	5.0	5.1	5.2	4.8	4.7	4.6	4.5	...	...
18	...	...	4.3	4.6	4.8	4.9	5.0	4.6	4.8	4.8	p4.5	...	...
19	...	...	4.7	4.8	4.6	4.6	4.8	4.8	4.7	4.6	4.3	...	...
20	...	4.3	4.7	5.1	5.0	5.0	5.2	5.0	4.9	5.0	4.5	...	...
21	...	4.3	4.7	4.9	4.9	5.1	4.9	4.8	5.0	4.8	4.4	...	...
22	...	...	4.7	4.8	4.9	5.0	4.8	5.0	4.8	4.7	4.2	...	...
23	...	4.1	4.6	4.8	4.9	4.9	4.8	4.8	4.8	4.5	4.2	...	...
24	...	4.4	4.8	4.7	4.8	4.9	4.8	4.8	4.7	4.2	4.1	...	...
25	...	4.2	4.4	4.8	5.0	4.9	5.0	5.0	4.8	4.5	4.0	...	...
26	...	4.4	4.8	4.9	4.9	4.9	4.9	4.9	4.6	4.6	4.2	...	...
27	...	...	4.8	4.8	4.9	4.9	4.9	4.8	5.0	4.7	4.2	...	...
28	...	4.6	4.7	5.0	4.9	4.9	5.0	4.8	4.9	4.8	4.2	...	...
29	...	4.3	4.5	5.0	5.0	5.0	4.9	5.0	4.8	4.5	4.2	...	...
30	...	...	...c	...c	...c	...c	p4.8c	p4.9c	5.0	4.7	4.3	...	...
31													
* MEAN	...	4.3	4.6	4.8	4.9	4.9	4.9	4.9	4.8	4.7	4.4	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	220	220	210	210	200	200	230	...	...
2	...	...	230	220	210	220	200	210	210	200	240	...	...
3	...	...	230	220	220	220	210	210	210	200	210	...	...
4	...	240	230	220	210	200	p210c	p220c	p210c	p210c	200	...	...
5	...	240	220	230	220	200	200	200	200	210	210	...	...
6	...	...	220	220	220	200	210	210	200	200	190	...	...
7	...	...	220	220	220	200	200	210	210	210	200	...	...
8	...	...	230	220	210	250	200	p200c	200	200	p220c	...	...
9	...	240	220	220	210	p200c	p200c	210	200	p200c	200	...	...
10	...	240	230	220	210	210	200	210	210	200	200	...	...
11	...	...	230	230	210	210	220	210	200	200	200	...	...
12	...	240	230	220	220	210	210	220	220	210	210	...	...
13	...	230	230	210	200	210	200	200	210	200	210	...	...
14	...	250	230	220	220	210	220	220	210	220	220	...	...
15	...	...	230	230	220	220	210	220	210	220	p230	...	...
16	...	250	240	230	230	220	220	220	230	220	230	...	...
17	...	...	240	230	230	230	220	220	220	220	240	...	...
18	...	...	250	250	250	230	230	220	230	250	p250	...	...
19	...	...	250	240	230	230	220	230	230	230	240	...	...
20	...	240	230	220	220	210	220	210	210	220	220	...	...
21	...	240	240	220	220	220	210	210	210	220	230	...	...
22	...	...	230	220	220	220	210	210	220	210	220	...	...
23	...	250	240	230	220	220	210	210	220	220	230	...	...
24	...	250	240	220	220	220	210	210	220	210	200	...	...
25	...	250	240	230	220	220	220	210	220	230	230	...	...
26	...	240	240	230	230	230	220	210	220	210	240	...	...
27	...	...	240	230	220	210	220	220	210	240	250	...	...
28	...	240	240	220	220	220	210	200	210	210	220	...	...
29	...	240	220	230	220	210	210	210	210	210	230	...	...
30	...	...	230	...c	...c	...c	...c	...c	240	220	210	...	...
31													
* MEAN	...	242	233	225	220	216	211	212	213	213	220	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 182

SEPTEMBER 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1941

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.6	1.0	1.2	1.8	1.9	2.0	1.8	1.8	1.1	1.0	0.7	0.6	1.5	2.0	2.9	3.3	3.7	3.8	3.9	3.8	3.6	3.2	2.6	2.3	1.1
2	0.6	0.9	1.0	1.1	2.0	1.8	1.8	2.0	1.8	1.7	1.4	0.8	0.7	1.6	2.5	2.8	3.2	3.8	3.8	3.8	3.6	3.6	3.3	2.8	2.3	1.2
3	0.6	0.6	0.8	1.1	1.1	1.3	1.8	1.8	1.4	1.1	1.1	1.0	0.6	1.6	2.4	2.8	3.3	3.6	3.5	3.8	3.5	3.5	3.1	2.7	2.2	1.1
4	0.6	0.6	1.0	1.2	1.2	1.2	p1.8c	p1.9c	p1.8c	p1.5c	1.3	0.7	0.6	1.6	2.2	2.8	3.2	3.6	3.6	p3.5c	p3.4c	p3.2c	p3.0c	2.9	2.2	1.2
5	1.0	1.2	1.3	1.4	1.6	1.8	1.7	1.7	1.8	1.5	1.2	0.7	0.6	1.2	2.4	3.0	3.4	3.6	3.6	3.6	3.6	3.4	3.4	2.8	2.2	1.2
6	1.0	1.0	1.4	1.6	1.6	1.8	1.8	1.8	1.6	1.6	1.2	1.2	0.7	1.6	2.5	3.2	3.5	3.6	3.7	3.7	3.5	3.4	3.3	2.7	2.3	2.4
7	0.7	0.8	1.2	1.3	2.2	2.1	2.0	2.0	1.7	1.4	1.2	0.7	0.6	1.6	2.3	2.8	3.4	3.5	3.6	3.7	3.6	3.5	3.4	2.7	2.4	1.2
8	1.2	0.6	1.2	1.7	2.0	1.7	p1.9c	p2.0c	1.8	1.3	p1.1c	0.7	0.6	1.7	2.4	2.7	3.4	3.6	3.7	2.8	p2.7c	2.6	2.8	p2.5c	2.1	0.8
9	0.5	0.8	1.0	1.2	1.2	p1.4c	p1.6c	p1.8c	2.0	p1.4	1.1	0.8	0.6	1.6	2.4	2.8	3.5	p3.1	p3.2c	p3.3c	p3.4c	3.5	p3.2c	2.8	2.2	1.1
10	0.6	0.8	0.9	1.1	1.2	0.8	1.7	1.7	1.7	1.2	1.0	0.8	0.6	1.6	2.5	2.9	3.3	3.6	3.6	3.7	3.6	3.4	3.3	2.7	2.2	0.9
11	0.7	1.0	1.0	1.4	1.7	1.8	1.7	1.8	1.9	1.1	1.0	0.8	0.6	1.6	2.6	3.0	3.4	3.5	3.8	3.8	3.5	3.4	3.3	2.8	2.2	1.2
12	0.6	0.7	0.9	1.2	1.2	1.9	2.2	2.1	2.0	1.7	1.0	0.8	0.6	1.7	2.5	2.7	3.3	3.8	3.8	3.4	3.5	3.2	3.3	2.9	2.4	1.2
13	0.6	1.0	1.1	1.7	1.7	1.8	1.9	1.8	1.7	1.2	1.2	0.8	0.6	1.8	2.5	3.1	3.3	3.7	3.6	3.5	3.7	3.5	3.3	2.8	2.3	1.1
14	0.7	1.0	1.1	1.7	1.7	1.8	1.7	1.7	1.2	1.2	1.0	0.7	0.6	1.7	2.6	3.0	3.4	3.7	3.7	3.8	3.7	3.5	3.2	2.7	2.0	1.2
15	0.6	1.2	1.2	1.7	1.7	1.8	1.9	1.8	1.3	1.2	1.1	0.8	0.6	1.8	2.0	3.1	3.6	3.6	3.8	3.9	3.7	3.5	3.3	2.9	2.2	1.0
16	0.6	1.1	1.7	1.7	1.7	2.0	2.2	1.9	1.7	1.7	1.1	0.6	0.6	1.8	2.7	3.0	3.4	3.5	4.0	4.0	3.9	3.8	3.6	2.7	2.4	1.2
17	0.6	0.8	1.1	1.8	2.0	2.0	2.2	1.2	1.9	1.7	1.2	0.9	0.6	1.8	2.7	3.2	3.5	4.0	4.0	4.0	4.1	3.8	3.3	2.3	2.3	1.3
18	0.8	1.1	1.9	2.5	2.6	1.9	2.0	2.0	2.0	1.3	1.0	0.8	0.6	2.1	2.9	3.3	3.6	4.0	4.0	4.1	4.0	3.8	3.3	2.8	2.3	1.2
19	0.6	1.0	1.7	2.0	2.0	2.0	2.1	2.2	2.0	1.8	1.8	1.0	0.6	1.8	2.7	3.1	3.8	3.9	4.0	4.0	3.9	3.5	3.3	2.7	2.4	1.1
20	0.8	0.9	1.2	1.7	1.9	2.0	2.7	2.1	1.8	1.7	1.4	0.7	0.6	2.0	2.8	3.2	3.5	3.7	4.0	4.0	3.9	3.7	3.4	2.8	2.4	1.2
21	0.6	0.9	1.0	1.8	1.8	2.0	1.9	2.0	1.9	1.8	1.0	0.9	0.7	2.0	2.8	3.2	3.7	3.9	4.0	4.1	3.8	3.5	3.3	2.9	2.4	1.2
22	0.6	0.6	1.0	1.2	1.8	2.2	2.3	1.9	1.8	1.9	1.8	1.0	0.6	1.8	2.6	3.1	3.5	3.9	4.0	4.0	3.8	3.8	3.3	2.9	2.6	1.2
23	0.6	1.1	1.8	1.9	2.0	1.9	1.9	2.8	1.9	1.4	1.2	1.8	0.8	1.9	2.8	3.1	3.5	3.8	3.9	3.6	4.0	3.5	3.2	2.8	2.4	1.2
24	0.8	1.0	1.2	1.8	1.7	1.7	1.9	2.0	1.7	1.2	1.0	0.8	0.6	1.8	2.6	3.0	3.3	3.6	3.8	3.8	3.8	3.5	3.2	2.7	2.3	1.7
25	0.6	0.8	1.0	1.2	1.8	1.9	1.9	1.9	1.7	1.3	1.2	0.8	0.6	1.8	2.6	3.2	3.5	3.7	3.9	4.0	3.8	3.6	3.4	2.8	2.3	1.1
26	0.6	0.7	1.2	1.3	1.7	1.8	1.9	1.2	1.3	1.0	1.0	0.8	0.8	1.9	2.7	3.2	3.5	3.6	4.0	4.0	3.7	3.4	3.3	2.7	2.3	1.1
27	0.6	1.0	1.1	1.2	1.7	1.8	1.8	1.8	1.9	1.7	1.1	1.0	0.6	1.8	2.7	3.1	3.5	3.7	3.8	3.9	3.8	3.7	3.3	2.7	2.2	1.2
28	0.8	1.1	1.2	1.8	1.8	1.8	1.8	1.7	1.2	1.2	1.1	0.8	0.7	1.9	2.8	3.1	3.4	3.7	3.8	3.9	3.6	3.4	3.2	2.7	2.2	1.0
29	0.6	2.4	1.4	2.4	2.6	2.5	2.4	2.4	2.5	2.4	1.0	0.6	0.7	2.1	2.7	3.2	3.4	p3.5	3.6	3.6	3.4	3.4	3.2	2.8	2.2	1.2
30	0.6	1.2	1.9	*p2.5c	p2.6c	2.6	2.6	2.6	2.5	2.4	2.4	2.2	1.2	1.2	2.8	3.2	...c	...c	...c	...c	...c	3.4	3.2	2.8	2.6	1.2
31																										
* MEAN	0.7	1.0	1.2	1.6	1.8	1.8	2.0	1.9	1.8	1.5	1.2	0.9	0.7	1.7	2.6	3.0	3.4	3.7	3.8	3.8	3.7	3.5	3.3	2.8	2.3	1.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 183

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1941 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — OCTOBER 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	8.4	7.3	7.8	7.4	6.8	6.5	7.5	8.5	p8.9c	p9.4c	p8.5c	p8.4c	p8.3c	p3.5c	p8.4c	p8.6c	p8.7c	p8.5c	p8.4c	p7.9c	p8.0c	p8.1c	8.2	7.4	8.1
2	6.7	p5.8c	p4.8c	p4.4c	p4.1c	p3.7c	6.1	8.2	p9.4c	p10.6c	p10.9c	p10.6c	p10.4c	p10.1c	9.9	10.0	10.5	10.4	10.0	9.3	8.4	9.4	10.0	9.4	8.5
3	7.6	5.8	5.1	4.7	4.4	3.9	6.3	8.5	9.7	10.5	10.5	9.8	9.8	9.8	9.5	9.2	9.2	9.2	9.2	8.4	p7.9f	p8.0f	7.8	8.2	8.0
4	8.2	5.7	4.8	4.5	4.0	3.8	6.4	8.9	10.2	10.5	9.3	8.0	8.0	8.7	9.3	9.8	10.0	9.7	9.3	7.6	p8.0f	p6.4f	p8.7f	10.0	8.0
5	8.7	6.2	5.2	4.3	3.3	3.2	5.7	8.1	9.4	9.4	8.4	8.4	8.2	8.5	9.3	9.7	10.3	10.9	11.0	10.0	8.5	p8.3f	p8.1f	8.1	8.0
6	8.2	7.0	5.3	4.5	3.6	3.2	6.5	8.6	9.7	9.8	8.9	8.3	8.2	8.5	8.3	8.5	9.0	9.6	9.6	9.2	8.9	8.7	9.8	10.0	8.0
7	9.1	6.4	4.7	3.8	3.1	3.2	6.3	8.5	9.9	10.5	10.6	10.2	9.1	9.0	9.2	9.4	9.9	10.1	10.1	8.9	p8.2f	p8.3f	p8.2f	p7.5f	8.1
8	7.2	5.0	5.6	5.1	5.2	4.7	7.1	9.3	10.5	10.7	9.8	8.4	7.7	7.8	8.3	8.7	9.0	9.4	9.7	8.6	8.0	p7.5f	p7.9f	p8.3f	7.9
9	7.6	6.8	6.5	6.3	4.5	3.7	6.6	9.3	10.4	10.1	8.7	8.0	7.9	8.0	8.0	8.3	8.6	8.8	8.9	8.3	8.0	p8.1f	p8.3f	p8.2f	7.8
10	p8.1f	6.7	4.8	3.8	4.1	p3.3f	6.3	8.5	9.8	10.4	10.2	8.0	7.6	7.9	8.4	9.0	9.7	10.1	10.3	9.3	p8.8f	p8.6f	p8.4f	p8.2f	7.9
11	9.2	8.6	5.8	4.6	4.5	3.5	5.9	8.0	10.0	10.0	9.6	8.7	7.8	7.9	8.4	8.8	10.0	10.9	11.1	10.1	9.7	10.8	9.9	9.6	8.5
12	8.9	8.5	7.5	6.8	6.4	5.8	6.2	8.8	10.1	11.0	10.9	9.8	9.0	8.6	8.8	9.6	9.7	9.8	9.8	8.9	8.5	8.6	9.0	9.1	8.8
13	8.7	6.0	5.2	4.7	4.7	4.6	6.6	9.1	10.7	11.4	11.0	9.4	9.1	9.1	9.4	9.6	9.7	9.9	9.8	9.1	7.9	p7.7f	7.8	8.3	8.3
14	8.2	p6.5f	6.0	5.5	4.9	4.6	7.0	9.0	10.8	11.2	11.1	10.0	9.7	9.5	9.1	9.1	9.5	10.0	10.2	10.0	9.2	8.7	8.8	9.3	8.7
15	8.7	7.5	6.0	6.0	5.6	4.8	6.5	9.6	11.2	12.0	12.2	11.7	10.1	9.7	9.8	10.2	10.4	10.2	9.6	9.0	8.3	7.8	6.9	7.6	8.8
16	8.0	7.9	6.7	6.8	6.7	7.0	9.1	10.8	12.3	12.1	12.4	11.5	9.7	9.5	10.0	10.5	11.0	10.9	10.7	10.5	11.0	11.2	10.8	9.9	9.9
17	9.8	9.0	7.1	5.2	4.4	4.0	6.0	8.8	10.2	10.4	10.7	10.2	10.0	10.1	10.1	10.1	10.2	10.4	9.7	8.1	p7.5	8.0	8.3	8.2	8.6
18	8.9	6.6	5.2	4.5	4.0	3.7	6.8	9.3	10.9	p11.8	12.6	12.2	11.2	11.1	11.1	11.0	11.2	11.6	11.4	9.4	7.8	7.5	7.4	6.8	8.9
19	7.0	6.5	6.3	5.6	5.3	p5.0f	6.3	8.9	11.4	11.5	11.1	9.6	9.7	10.2	10.9	10.5	10.5	10.5	9.9	9.3	8.1	p6.7f	p5.4f	p4.8f	8.4
20	p4.8f	p4.8f	p4.8f	4.5	4.4	4.4	7.2	9.5	11.0	...c	...c	...c	...c	...c	10.5	11.1	11.8	11.9	12.3	11.3	10.0	8.7	p8.4f	8.0	...
21	8.0	7.4	6.9	6.6	6.6	6.3	8.2	10.4	p10.8c	p11.2c	11.5	9.5	8.8	9.4	10.2	10.8	12.2	12.8	12.4	11.4	p10.0f	p8.0f	7.9	8.1	9.4
22	7.8	6.9	6.2	5.4	p4.7f	p4.4f	p6.3f	8.9	10.3	10.2	9.7	9.3	8.1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...c	...c	...c	...c	...c	...c	...c	...c	...c	11.4	11.8	12.0	10.7	10.1	9.8	10.2	10.8	11.2	10.8	9.5	8.0	7.3	7.7	8.2	...
24	7.7	6.9	6.8	6.5	5.7	5.4	7.6	10.2	11.0	11.2	10.9	9.1	9.2	9.4	9.3	9.5	10.2	11.0	10.5	9.8	8.7	7.8	p6.4f	p7.0f	8.7
25	7.7	7.4	p7.3f	7.5	6.7	5.7	8.0	9.7	10.4	11.5	11.1	10.0	9.0	8.6	9.3	10.0	10.9	11.4	11.5	11.4	p10.3	10.0	10.0	p9.0	9.4
26	p8.2	p7.4	6.6	5.7	5.2	4.1	6.9	8.3	9.2	p10.8c	p10.2	p9.6	p3.9	8.3	p8.7c	9.0	p9.8c	10.6	p10.6c	p10.5c	10.5	p9.4c	8.3	p7.8c	8.5
27	p7.3c	p6.6	5.8c	4.8c	3.6c	p3.3c	7.2c	8.8c	10.2c	10.9	11.3	11.1	9.9	8.9	8.7	8.8	8.8	8.5	8.9	...c	...c	...c	...c	...c	...
28	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	p11.7	12.2	12.4	12.3	11.7	11.6	11.0	10.3	9.5	8.9	8.2	7.8	p8.2f	p8.3f	...
29	p8.0f	6.3	3.6	2.6	2.3	2.8	6.0	8.4	9.7	10.4	10.4	10.6	10.2	10.0	9.9	9.8	9.7	9.4	9.2	8.7	8.2	p7.9f	p7.8f	p7.6f	7.9
30	7.4	6.8	5.9	4.1	3.0	3.1	6.2	8.4	9.2	9.6	9.5	10.6	10.5	10.2	10.6	11.1	11.2	9.9	p10.0b	10.1	p8.8f	p8.0f	p7.5f	p7.7f	8.3
31	p7.0f	6.5	p6.5f	p5.1f	p3.8f	p2.5f	6.5	8.7	9.8	10.8	11.0	11.6	12.4	12.5	13.2	13.4	13.0	12.4	9.6	p8.2f	p7.4a	p7.5a	p7.6a	p7.7a	8.9
MEAN*	8.0	6.8	5.9	5.2	4.7	4.3	6.7	9.0	10.2	10.7	10.6	9.9	9.4	9.4	9.6	9.9	10.2	10.3	10.1	9.4	8.6	8.4	8.3	8.2	8.5

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 184

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1941 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — OCTOBER 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	250	220	260	270	270	260	240	q280c	q320c	q350c	q360c	q360c	q390c	q360c	q330c	q310c	q270c	q300c	q360c	q350c	q240c	260	250	295
2	240	q250c	q210c	q250c	q270c	q270c	250	240	q270c	q300c	q330c	q340c	q350c	q340c	350	330	290	260	280	370	310	240	220	220	282
3	220	260	280	250	280	290	260	280	300	330	350	360	340	350	340	340	220	260	290	320	360	330	220	220	294
4	220	240	230	240	250	260	260	280	320	330	360	380	360	380	350	330	230	260	290	490	340	290	260	240	300
5	240	230	240	230	270	340	260	290	320	330	360	390	360	380	360	340	260	270	290	360	390	280	270	240	304
6	230	220	240	250	250	290	260	290	320	330	370	370	360	390	360	330	320	260	280	330	310	340	250	240	300
7	220	220	240	260	290	300	260	270	300	320	360	360	370	370	370	370	330	270	300	350	320	340	280	220	304
8	230	260	250	270	280	250	260	280	310	340	360	390	380	360	380	380	250	270	290	360	340	300	280	250	305
9	240	230	260	230	240	250	260	280	300	330	360	400	350	370	350	390	310	270	290	400	400	360	320	280	311
10	220	220	250	240	270	270	250	280	310	350	370	380	390	380	360	330	310	260	300	390	420	320	300	240	309
11	260	230	240	280	250	230	260	280	300	340	370	370	380	380	360	350	310	310	310	380	300	240	270	280	303
12	270	240	240	270	310	360	270	290	310	330	350	350	330	380	350	340	300	260	280	360	380	310	260	250	308
13	240	240	250	270	290	270	250	270	300	320	350	350	370	370	350	340	300	250	280	380	360	360	360	300	309
14	250	240	250	260	250	240	260	270	300	300	360	350	340	360	320	350	300	260	270	300	290	280	270	240	288
15	240	230	230	250	300	300	250	280	300	320	340	350	320	310	360	320	310	270	290	360	330	300	330	300	300
16	290	260	260	280	280	280	260	270	290	300	350	360	320	350	340	320	290	260	275	280	270	245	250	230	288
17	220	220	230	230	250	340	260	290	310	320	320	320	330	340	340	300	310	270	290	350	350	300	290	270	294
18	220	230	240	230	240	270	250	280	290	310	330	330	310	350	330	320	290	260	290	370	400	400	320	280	298
19	240	250	250	270	290	q280f	260	270	300	330	350	340	330	320	340	310	310	270	290	340	370	420	440	400	315
20	300	240	250	270	290	300	260	300	310	...c	...c	...c	...c	...c	320	320	300	250	270	350	370	390	380	300	...
21	290	270	290	310	280	240	260	270	q290c	q310c	330	350	330	330	330	330	300	260	280	330	390	400	380	340	312
22	300	270	250	270	290	300	250	300	320	320	330	360	380	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...c	...c	...c	...c	...c	...c	...c	...c	...c	300	350	350	330	360	320	330	300	260	290	340	400	360	300	240	...
24	240	260	240	250	250	260	240	280	300	320	360	340	340	360	340	340	300	250	280	300	320	330	390	350	302
25	320	310	270	270	250	250	260	280	300	340	340	360	340	330	380	330	300	250	270	320	300	320	280	300	303
26	290	260	240	250	230	230	230	270	280	q330c	q340c	q350c	q360c	370	360	350	330	300	q300	q300	q300	q300	q300	q280	298
27	q260c	q260c	q260c	q230c	q260c	q290c	q250c	q290c	q310c	330	360	340	350	370	340	340	310	250	...c	...c	...c	...c	...c	...c	...
28	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	330	340	330	330	350	320	300	270	280	310	330	320	280	250	...
29	230	220	240	240	260	300	260	290	300	330	340	370	360	350	340	320	300	250	280	330	320	360	340	260	300
30	240	240	240	250	240	260	250	290	310	320	330	340	320	340	370	320	290	270	q320b	370	360	350	360	300	303
31	260	250	290	300	300	320	260	270	300	310	320	350	330	330	330	320	310	280	300	q380f	450	470	q420a	q370a	326
MEAN*	250	245	248	257	268	280	256	278	302	323	347	357	347	357	348	335	296	265	288	351	349	328	306	274	302

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 185

OCTOBER 1941 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — OCTOBER 1941

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	p4.7c	p4.8c	p4.8c	p4.8c	...c	...c	...c	...c	...c	...	...
2	...	...	...c	p4.5c	...c	...c	...c	...c	4.7	4.6	4.3	...	...
3	...	4.3	4.7	4.8	4.8	4.9	4.8	5.0	4.7	4.5	...	...	...
4	...	4.2	4.7	4.8	4.9	4.9	4.8	4.8	4.5	4.6	...	...	...
5	...	4.5	4.6	4.7	4.8	4.8	4.8	4.6	4.6	4.5	...	...	...
6	...	4.5	4.7	4.7	4.8	4.8	4.8	4.9	4.7	4.6	4.2	...	...
7	...	4.2	4.5	4.8	4.8	4.9	4.9	4.8	4.6	4.5	4.4	...	...
8	...	4.3	4.7	4.9	4.8	4.9	4.8	4.7	4.8	4.8	...	...	...
9	...	4.5	4.6	4.8	4.8	5.1	4.8	4.8	4.8	5.0	4.2	...	...
10	...	4.2	4.7	4.8	4.9	4.8	4.8	4.8	4.6	4.4	4.2	...	...
11	...	4.2	4.5	4.7	4.8	4.8	4.8	4.8	4.7	4.5	4.3	...	...
12	...	4.2	4.5	5.0	4.8	4.9	4.8	4.8	4.8	4.7	4.2	...	...
13	...	4.4	4.5	4.9	5.0	4.9	5.0	4.8	4.8	4.7	4.2	...	...
14	...	4.2	4.5	4.8	5.0	4.9	4.9	4.8	4.5	4.6	4.3	...	...
15	...	4.3	4.6	4.8	5.0	4.8	4.9	4.7	4.9	4.6	4.2	...	...
16	...	4.2	4.6	4.8	5.0	5.0	4.8	5.0	4.8	4.6	4.3	...	...
17	...	4.2	4.8	5.0	4.8	4.9	4.9	4.8	4.7	4.5	4.3	...	...
18	...	4.3	4.6	4.9	4.9	4.9	4.7	4.7	4.8	4.6	4.3	...	...
19	...	4.2	4.7	4.9	4.9	5.0	5.0	4.8	4.8	4.5	4.2	...	...
20	...	4.4	4.8	...c	...c	...c	...c	...c	4.8	4.8	4.3	...	...
21	...	4.2	p4.4c	p4.7c	4.9	4.9	4.8	4.8	4.8	4.7	4.4	...	...
22	...	4.2	4.7	4.7	4.9	4.8	4.9	...c	...c	...c	...c	...	...
23	...	p4.2c	p4.5c	4.7	4.7	4.8	4.8	4.9	4.7	4.6	4.4	...	...
24	...	4.3	4.5	4.7	4.8	4.8	4.9	4.8	4.6	4.5	4.3	...	...
25	...	4.3	4.7	5.0	4.8	4.9	4.8	4.6	4.9	4.7	4.2	...	...
26	...	4.2	4.5	p4.8c	p4.8c	p4.9c	p4.8c	p4.7c	p4.8c	p4.9c	p4.4c	...	...
27	...	p4.3c	p4.7c	5.0	4.7	4.8	4.8	4.8	4.7	4.6	4.2	...	...
28	...	p4.3c	p4.7c	p4.8c	4.8	4.9	4.7	4.7	4.8	4.5	4.3	...	...
29	...	4.2	4.6	4.8	4.8	4.9	4.9	4.7	4.5	4.4	4.2	...	...
30	...	4.2	4.5	4.7	4.8	4.8	4.8	4.6	4.9	4.5	4.2	...	...
31	...	4.2	4.5	4.6	4.8	4.9	4.8	4.6	4.5	4.4	4.3	...	...
MEAN*	...	4.3	4.6	4.8	4.8	4.9	4.8	4.8	4.7	4.6	4.3	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
2	...	...c	...c	...c	...c	...c	...c	...c	220	200	220	...	...
3	...	240	230	230	220	220	210	210	210	220	...	...	...
4	...	240	240	220	220	220	210	210	210	210	...	...	...
5	...	250	240	220	220	220	210	210	200	190	...	...	...
6	...	240	230	220	220	210	210	200	200	220	230	...	...
7	...	240	230	220	210	220	210	210	210	210	230	...	...
8	...	250	230	230	220	220	210	210	210	210	...	...	...
9	...	240	230	230	230	230	210	200	200	220	230	...	...
10	...	250	240	230	220	220	210	200	210	220	220	...	...
11	...	250	240	220	230	210	210	200	210	210	240	...	...
12	...	250	240	230	230	220	220	210	210	220	230	...	...
13	...	240	230	240	220	210	210	210	200	220	230	...	...
14	...	230	230	230	220	220	210	210	210	220	230	...	...
15	...	240	230	240	220	220	200	210	200	210	230	...	...
16	...	240	230	230	210	210	200	200	210	210	230	...	...
17	...	240	230	230	220	220	210	210	210	220	230	...	...
18	...	240	230	220	220	210	205	200	210	210	240	...	...
19	...	240	240	230	230	220	210	210	220	230	240	...	...
20	...	260	250	...c	...c	...c	...c	...c	220	220	240	...	...
21	...	240	p230c	p230c	230	220	210	220	210	220	220	...	...
22	...	240	230	220	220	220	220	p210c	p210c	p220c	p230c	...	...
23	...	p240c	p230c	230	220	230	220	210	210	220	220	...	...
24	...	220	230	230	220	220	220	220	210	210	220	...	...
25	...	240	230	230	220	220	220	210	220	220	230	...	...
26	...	250	220	230	p220c	p220c	p210c	210	p210c	200	p220c	...	...
27	...	250	230	210	210	210	215	210	200	200	210	...	...
28	...	p250c	p240c	p230c	220	230	220	220	220	220	230	...	...
29	...	250	240	230	230	210	230	220	230	220	220	...	...
30	...	240	230	220	220	220	220	220	220	220	240	...	...
31	...	250	230	230	220	230	230	230	230	230	230	...	...
MEAN*	...	243	233	227	221	219	214	210	211	215	229	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 186

OCTOBER 1941 — OCTOBER 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	p1.0c	1.1	2.2	2.0	p2.1c	2.2	2.4	2.4	2.4	1.9	1.4	1.0	0.7
2	1.3	1.2	2.4	p2.4c	p2.5c	2.5	p2.2c	p2.0c	1.8	1.2	1.2	1.0	0.8
3	0.6	1.0	1.2	1.7	1.7	1.8	1.8	1.8	1.7	1.2	1.2	1.0	0.7
4	0.8	1.0	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.0	0.8	0.8
5	0.8	1.0	1.1	1.3	1.7	1.8	1.8	1.8	1.8	1.3	1.1	0.9	0.6
6	0.6	0.8	1.1	1.7	1.7	1.8	1.8	1.7	1.7	1.3	1.2	1.0	0.7
7	0.6	0.9	1.8	1.8	1.8	1.7	1.8	1.7	1.7	1.7	1.2	1.0	0.6
8	0.8	1.2	1.1	1.7	1.8	1.8	1.8	1.7	1.7	1.2	1.2	0.7	0.8
9	0.6	1.1	1.1	1.8	1.8	1.9	1.8	1.8	1.7	1.2	1.1	1.0	0.6
10	0.6	1.1	1.2	1.7	1.8	1.7	1.8	1.7	1.7	1.2	1.1	1.0	0.7
11	0.9	1.2	1.1	1.2	1.7	1.7	1.9	1.7	1.7	1.2	1.2	0.8	0.6
12	0.8	1.2	1.1	1.1	1.7	1.7	1.8	1.8	1.7	1.2	1.1	0.8	0.7
13	0.6	1.1	1.1	1.8	1.8	1.8	1.7	1.8	1.7	1.3	1.1	1.0	0.6
14	0.6	0.8	1.1	1.3	1.7	1.7	1.8	1.7	1.8	1.2	1.2	1.1	0.8
15	0.6	1.0	1.3	1.8	1.8	1.8	1.9	1.8	1.8	1.7	1.2	1.0	0.6
16	0.6	0.8	1.0	1.2	1.7	1.8	1.8	1.7	1.8	1.7	1.2	1.2	0.6
17	0.6	1.0	1.1	1.7	1.8	1.8	1.8	1.8	2.1	1.7	1.1	0.6	0.6
18	0.6	1.0	1.7	1.7	1.7	1.8	1.8	1.8	1.7	1.2	1.2	1.0	0.6
19	0.6	0.6	1.0	1.2	1.1	1.7	1.8	1.8	1.7	1.1	1.2	1.0	0.6
20	0.6	0.6	1.0	...c	...c	...c	...c	...c	1.9	1.6	1.0	1.0	0.7
21	0.8	1.1	p1.3c	p1.6c	1.8	1.7	1.7	2.0	2.1	1.8	1.0	0.9	0.6
22	0.8	1.0	1.1	1.8	1.8	1.7	1.9	...c	...c	...c	...c	...c	...c
23	...c	...c	...c	1.7	1.8	1.8	1.8	1.8	1.8	1.7	1.2	1.0	0.6
24	0.8	1.2	1.2	1.7	1.7	1.8	1.8	1.8	1.8	1.4	1.4	1.0	0.6
25	0.6	1.0	1.1	1.7	1.8	1.7	1.9	1.8	1.8	1.7	1.2	1.0	1.0
26	1.0	1.0	1.7	2.4	p2.5c	p2.2c	p2.0c	1.8	p1.7c	1.6	...c	...c	...c
27	...c	...c	...c	...c	1.7	1.7	1.7	1.7	1.4	1.3	1.0	0.8	p0.8c
28	...c	...c	...c	...c	2.0	2.0	1.9	1.9	1.8	1.8	1.2	1.1	1.0
29	0.7	1.1	1.2	1.7	1.8	1.8	1.9	1.8	1.8	1.6	1.2	1.0	0.6
30	0.7	1.0	1.2	1.7	1.8	1.8	1.9	1.9	1.9	1.8	1.2	1.0	p0.8b
31	0.8	1.0	1.2	1.2	1.3	2.0	1.8	1.9	1.8	1.7	1.2	1.0	0.8
* MEAN	0.8	1.0	1.3	1.7	1.8	1.8	1.8	1.8	1.8	1.5	1.2	1.0	0.7

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	2.6	p3.1c	...c	...c	...c	...c	...c	...c	3.2	2.8	2.0	1.1
2	1.8	2.7	3.1	...c	...c	...c	...c	...c	3.6	3.2	2.7	2.3	1.1
3	1.9	2.7	3.0	3.4	3.8	3.8	3.9	3.8	3.5	3.2	2.7	2.3	1.1
4	2.0	2.7	3.2	3.5	3.8	3.8	3.8	4.0	3.5	3.2	2.7	2.2	1.0
5	2.0	2.8	3.2	3.5	3.7	3.8	3.8	3.8	3.5	3.2	2.9	1.7	1.0
6	1.8	2.7	3.1	3.4	3.8	3.7	3.8	3.6	3.5	3.2	2.8	2.2	1.2
7	1.8	2.8	3.2	3.5	3.8	3.8	3.9	3.8	3.8	3.3	2.9	2.3	1.1
8	2.0	2.8	3.2	3.9	3.8	3.9	3.9	3.9	3.7	3.3	2.9	2.3	1.1
9	2.1	2.8	3.1	3.5	3.8	4.0	4.0	3.8	3.5	3.2	2.4	2.3	1.1
10	2.0	2.7	3.3	3.8	3.7	3.9	3.8	4.0	3.6	3.3	2.8	2.3	1.1
11	2.0	2.6	3.1	3.5	3.6	3.9	3.9	3.8	3.5	3.2	3.5	2.4	1.2
12	2.0	2.7	3.1	3.5	3.7	3.8	4.0	3.7	3.8	3.3	2.6	2.3	1.2
13	2.1	2.8	3.2	3.8	3.8	3.8	4.0	3.8	3.6	3.3	2.8	2.2	1.6
14	2.0	2.8	3.3	3.7	3.8	3.8	3.9	3.9	3.6	3.2	2.7	2.2	1.1
15	2.1	2.8	3.5	3.8	3.8	4.0	3.8	3.8	3.5	3.3	2.8	2.2	1.1
16	1.8	2.8	3.2	3.6	3.8	3.9	3.9	3.6	3.8	3.2	2.8	2.3	1.2
17	2.1	2.8	3.2	3.6	3.7	4.0	3.8	3.7	3.5	3.2	2.8	2.2	1.1
18	2.1	2.8	3.1	3.4	3.7	3.8	3.8	3.8	3.6	3.2	2.9	2.2	1.2
19	2.1	2.7	2.9	3.4	3.5	3.8	4.0	3.8	3.7	2.9	2.8	2.2	0.9
20	2.1	2.6	3.0	p...c	p...c	p...c	p...c	p...c	3.4	3.2	2.8	2.2	1.1
21	2.1	2.6	p3.1c	p3.3c	3.5	3.8	3.9	3.8	3.8	3.7	2.6	2.2	1.1
22	2.1	2.8	3.2	3.7	3.5	3.7	3.9	...c	...c	...c	...c	...c	...c
23	...c	...c	...c	3.5	3.6	3.9	4.0	3.8	3.6	3.2	2.8	2.3	1.2
24	2.1	2.0	3.2	3.5	3.8	4.0	4.0	3.9	3.6	3.2	2.3	2.3	1.1
25	2.1	2.1	3.2	3.4	3.6	3.8	4.0	4.0	3.7	3.2	2.7	2.2	1.1
26	2.1	2.8	3.2	3.9	p3.9c	p3.8c	p3.7c	3.6	p3.4c	3.2	...c	...c	...c
27	p2.1c	2.2	3.3	p3.4c	3.4	3.6	3.5	3.7	3.4	3.0	2.4	2.1	p1.1c
28	...c	...c	...c	...c	3.8	3.8	3.8	3.6	3.5	3.2	2.7	2.5	1.0
29	2.2	2.8	3.2	3.6	3.6	3.6	3.7	3.6	3.4	3.0	2.6	2.2	1.1
30	2.0	2.6	3.0	3.4	3.7	3.8	3.8	3.6	3.6	3.1	2.8	2.5	p1.1b
31	2.2	2.8	3.1	3.4	3.6	3.8	3.8	3.6	3.5	3.0	2.7	2.2	1.2
* MEAN	2.0	2.7	3.2	3.6	3.7	3.8	3.9	3.8	3.6	3.2	2.8	2.2	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 187

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1941 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — NOVEMBER 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p7.8f	p7.9f	p7.0f	p5.4f	p3.8f	p2.1f	6.3	10.0	11.3	12.1	12.3	10.8	11.2	11.7	11.8	12.1	10.6	9.0	9.1	9.2	8.9	8.6	8.1	8.1	9.0
2	9.2	7.5	7.0	4.8	3.0	3.1	7.0	9.4	10.4	9.9	10.0	9.7	10.0	10.5	11.0	11.2	11.7	12.2	11.9	11.2	11.2	10.6	10.0	10.6	9.3
3	9.8	8.7	5.5	4.8	5.0	4.5	7.2	9.5	10.4	9.4	9.2	9.5	10.2	10.1	10.2	10.7	10.8	10.6	10.9	10.5	10.1	9.2	7.8	7.0	8.8
4	6.8	7.1	6.4	5.9	4.7	4.3	7.8	9.6	10.1	10.1	9.2	9.4	9.8	10.1	10.2	10.6	11.4	11.9	12.0	11.5	11.1	9.7	8.8	8.1	9.0
5	7.8	6.6	6.5	5.5	5.3	p4.9f	6.6	9.0	10.1	10.5	10.0	9.8	9.8	9.6	10.5	11.4	...c	...c	...c	...c	p11.6c	10.9	9.8	9.5	...
6	9.5	6.7	4.6	3.6	3.2	3.4	p5.4c	p7.4c	p9.5c	11.5	11.3	10.5	10.0	9.5	10.2	11.1	11.2	11.5	11.8	11.5	10.8	10.4	9.6	8.7	8.5
7	9.8	8.6	7.0	5.0	4.0	3.5	7.0	9.4	10.5	p9.8	9.4	9.5	9.6	9.6	9.8	10.0	10.7	p11.6c	p11.6c	11.5	10.2	10.0	8.2	6.8	8.9
8	5.6	4.7	4.6	4.3	4.6	p4.0f	6.6	9.9	11.6	11.7	11.4	10.3	10.7	11.3	10.7	10.2	10.3	10.8	11.4	10.9	10.4	9.9	8.8	8.3	8.9
9	7.4	6.6	6.4	5.7	4.5	2.9	6.8	8.6	9.9	10.7	10.8	10.0	10.3	10.0	9.9	8.9	8.1	8.2	9.3	9.0	8.1	7.9	7.8	p7.1f	8.1
10	p6.8f	p6.3f	5.7	5.7	5.6	4.8	7.6	9.4	10.5	10.5	9.4	10.0	10.5	9.9	8.8	9.2	9.8	9.8	9.5	8.4	7.1	8.2	7.0	p6.4f	8.2
11	p6.0f	5.8	5.7	5.8	4.8	4.3	7.0	9.5	11.1	11.6	11.6	11.8	11.0	10.2	10.2	10.5	10.9	10.5	9.6	9.4	10.6	12.1	10.3	10.3	9.2
12	7.8	6.6	5.9	5.6	p4.6f	p4.1f	6.5	8.6	10.5	11.3	12.2	12.3	11.9	12.2	12.3	11.4	10.2	9.7	9.4	9.1	8.9	8.4	9.4	8.8	9.1
13	7.6	7.0	5.6	3.9	2.7	3.3	6.4	8.7	10.1	11.1	11.2	11.4	11.6	10.8	10.9	10.4	10.4	9.7	8.5	8.2	p6.9f	...f	...f	...f	...
14	...f	4.3	4.2	4.2	4.2	4.2	7.1	9.3	10.0	11.3	11.4	12.7	13.0	13.2	13.7	13.0	12.2	11.5	9.2	7.8	6.7	p5.6f	...f	...f	...
15	...f	...f	4.4	4.5	3.6	3.5	6.7	8.4	9.8	10.5	10.5	10.0	10.8	11.2	11.5	11.7	11.9	11.6	11.6	11.6	p10.5f	7.7	7.3	6.8	...
16	5.6	4.8	4.0	4.0	3.8	3.7	6.4	8.2	9.2	9.1	9.1	9.5	9.7	9.8	10.3	10.4	10.1	10.0	9.3	9.0	9.4	9.4	7.4	6.5	7.9
17	4.9	4.5	4.6	4.5	4.8	4.8	7.0	9.0	10.2	10.2	9.5	8.7	9.5	11.0	11.6	12.1	12.3	12.6	12.7	12.5	10.6	9.7	9.2	8.7	9.0
18	7.9	6.8	5.7	4.6	3.5	3.3	6.8	9.4	10.9	10.8	11.1	10.5	9.8	10.1	10.4	11.4	12.1	11.9	12.0	12.0	9.8	8.2	7.7	7.7	8.9
19	6.4	5.7	5.7	5.3	4.0	3.5	6.4	8.0	8.4	8.5	8.4	8.3	8.4	9.0	9.4	9.6	9.9	9.7	10.0	9.9	9.4	7.8	7.4	7.5	7.8
20	6.8	4.1	2.7	2.2	2.0	2.8	6.7	9.2	10.5	10.7	10.5	9.8	10.1	10.5	10.7	11.0	11.6	11.8	12.0	11.1	9.8	8.6	8.3	p6.7f	8.3
21	p4.8f	4.8	4.0	3.0	2.7	3.3	6.4	9.2	9.8	8.9	8.7	8.8	9.0	9.7	10.2	11.0	11.6	12.0	11.5	11.4	10.3	8.6	6.9	5.8	8.0
22	4.6	4.6	4.1	3.7	3.3	3.4	7.2	9.8	10.0	9.9	8.8	8.6	8.3	8.4	9.1	9.9	10.2	10.3	10.2	10.4	8.3	...f	...f	...f	...
23	...f	...f	...f	...f	...f	2.9	6.8	9.6	10.5	10.1	10.7	9.7	8.9	9.4	10.0	10.5	10.8	11.0	11.0	10.4	10.0	8.9	7.6	5.8	...
24	4.4	3.1	p3.0f	p2.8f	p2.8f	2.9	6.8	9.4	10.7	10.2	9.9	8.9	8.8	8.8	9.4	9.4	9.1	8.7	9.4	9.4	8.8	7.6	7.0	p6.5f	7.4
25	p5.6f	4.8	4.5	4.8	4.3	4.5	7.2	8.7	10.0	9.5	8.9	8.8	8.5	8.8	9.3	9.9	10.1	10.1	10.2	10.0	8.4	7.5	p6.8f	p6.1f	7.8
26	p5.3f	4.5	4.4	4.5	4.6	4.7	7.3	9.4	10.2	10.7	10.6	10.3	9.8	10.2	10.2	9.8	9.5	9.5	9.3	9.5	9.9	8.7	7.7	6.5	8.2
27	4.8	4.7	4.4	4.9	5.4	4.8	6.7	8.5	9.5	9.7	10.2	11.2	12.1	12.2	12.2	12.7	12.8	12.8	12.7	11.9	10.3	8.3	...f	...f	...
28	...f	...f	...f	...f	...f	3.1	7.2	10.3	11.8	11.6	11.3	11.6	11.5	12.0	11.9	11.8	11.3	11.0	11.0	9.3	8.0	p6.5f	p6.6f	p6.6f	...
29	6.4	5.9	p5.4f	p4.8f	p4.5f	2.7	6.5	8.5	9.9	10.5	10.5	10.0	10.2	11.3	12.2	12.2	12.0	11.6	11.0	9.6	8.3	6.6	4.7	p4.5f	8.3
30	4.4	4.3	4.7	5.1	4.3	4.5	6.4	8.7	10.2	10.5	11.2	11.5	11.3	11.6	11.9	12.0	11.7	11.3	10.9	9.4	6.9	6.1	6.0	4.8	8.3
31																									
MEAN*	6.6	5.8	5.1	4.6	4.1	3.7	6.8	9.1	10.2	10.4	10.3	10.1	10.2	10.4	10.7	10.9	10.9	10.8	10.7	9.8	9.4	8.6	7.9	7.3	8.5

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 188

NOVEMBER 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1941

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	330	320	340	350	320	270	270	270	290	300	310	300	320	340	320	300	330	260	260	260	280	290	290	300	301
2	270	240	220	220	220	240	250	280	280	300	330	320	320	320	310	300	300	250	260	290	290	320	300	260	279
3	230	210	240	240	230	250	250	280	300	300	310	320	350	330	350	340	300	250	260	280	320	360	350	320	286
4	280	260	250	240	240	240	260	280	300	310	330	330	330	330	330	320	290	260	270	290	280	300	330	320	290
5	300	250	240	260	280	310	250	280	310	300	330	350	340	340	330	290	320	270	270	300	300	270	270	270	293
6	230	230	240	270	280	q280c	270	300	300	300	330	320	350	340	300	310	290	270	270	280	300	300	340	300	292
7	240	230	220	230	240	260	250	280	300	310	330	340	350	350	350	340	300	250	280	310	310	320	390	400	299
8	440	450	410	370	320	290	250	280	280	300	300	320	320	330	330	300	300	250	260	310	310	330	350	340	322
9	340	270	250	230	230	250	240	270	300	320	330	330	330	320	360	330	300	250	260	310	320	350	340	320	298
10	300	280	250	230	230	250	260	280	300	300	320	340	350	360	330	320	300	250	280	330	330	300	360	380	301
11	350	270	230	240	230	240	260	290	290	300	300	350	340	350	350	320	300	250	280	300	270	260	260	260	287
12	260	250	240	260	270	270	270	270	290	300	320	340	360	370	330	310	300	250	270	330	300	370	290	300	297
13	280	280	230	230	250	290	250	290	310	300	330	340	330	330	320	330	320	260	280	320	300	310	480	330	304
14	320	310	250	260	260	260	250	280	290	300	310	340	340	350	340	330	310	290	280	340	350	320	400	430	313
15	450	360	300	240	220	250	250	240	290	340	340	360	350	320	330	320	300	260	270	280	330	390	380	330	312
16	300	300	290	270	250	260	250	280	310	320	320	360	330	330	340	350	310	260	280	280	280	300	310	330	305
17	390	390	350	310	270	270	270	290	320	320	370	360	320	340	300	330	290	250	260	250	260	270	270	290	306
18	280	300	310	250	240	280	260	300	290	320	320	350	340	330	330	300	280	270	280	310	380	440	390	340	312
19	340	290	250	230	230	270	250	280	300	330	350	350	310	350	320	330	300	260	280	300	320	340	310	260	302
20	230	220	240	260	250	280	260	290	300	330	350	340	330	360	350	340	300	270	280	320	360	370	370	380	308
21	340	230	250	260	240	290	260	270	290	320	350	350	370	400	350	340	350	250	320	300	330	360	380	340	314
22	310	280	260	250	260	270	260	290	320	360	420	370	360	370	360	360	360	320	310	360	440	500	520	q500f	346
23	q470f	450	420	450	370	310	260	280	320	340	370	360	360	380	370	300	320	250	270	290	310	300	330	380	344
24	400	390	400	480	450	320	260	280	320	340	420	400	400	370	400	350	330	270	270	280	330	340	340	380	355
25	340	300	260	260	240	250	260	290	330	350	390	370	380	400	340	370	370	290	270	310	410	390	390	420	332
26	400	330	280	270	240	250	250	280	290	330	350	370	390	370	390	360	320	250	280	290	280	330	350	350	317
27	300	250	260	290	290	280	260	310	320	340	340	370	360	380	380	370	330	260	270	310	420	420	460	450	334
28	510	530	570	600	630	340	270	290	300	340	320	340	340	360	350	340	340	290	300	380	460	400	360	280	385
29	300	330	330	300	300	320	260	290	300	360	360	370	380	370	390	380	360	270	290	380	420	440	410	390	346
30	370	330	260	240	230	320	270	230	320	310	360	340	350	380	360	370	340	270	290	360	410	420	370	350	327
31																									
MEAN*	330	304	288	286	277	275	258	281	302	320	340	347	347	352	344	332	315	263	277	308	333	347	356	343	314

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 189

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.2	4.5	4.8	4.9	4.8	5.2	5.1	4.9	4.6	4.7	...	...
2	...	4.5	4.7	4.8	5.0	4.9	5.0	4.9	4.9	4.6	4.4	...	...
3	...	4.3	4.7	4.8	5.0	4.8	5.3	5.2	4.8	4.6	4.2	...	...
4	...	4.5	4.8	5.0	4.9	4.9	4.9	4.8	4.9	4.8	4.2	...	...
5	...	4.2	4.8	4.8	5.0	5.0	4.9	4.8	4.8	4.5	4.5	...	...
6	...	4.5	4.6	4.8	4.8	4.8	4.8	4.7	4.8	4.7	4.4	...	...
7	...	4.4	4.7	4.8	4.8	4.9	5.0	4.8	5.1	4.7	4.4	...	...
8	...	4.3	4.7	4.8	4.8	4.8	4.8	4.8	4.6	4.6	4.4	...	...
9	...	4.2	4.6	4.7	4.8	4.8	4.7	4.7	4.9	4.6	4.2	...	...
10	...	4.3	4.8	4.8	4.8	4.8	4.8	4.8	4.6	4.6	4.2	...	...
11	...	4.2	4.8	4.8	4.7	4.8	4.7	4.8	4.8	4.6	4.3	...	...
12	...	4.3	4.8	4.8	4.8	4.8	5.0	4.9	4.8	4.6	4.4	...	...
13	...	4.3	4.7	4.9	5.0	4.9	4.9	4.8	4.8	4.9	4.4	...	...
14	...	p4.4a	4.8	4.8	4.9	4.9	4.8	4.8	4.8	4.5	4.5	...	...
15	...	p4.4	4.7	4.8	4.8	4.8	5.0	4.8	4.5	4.5	4.4	...	...
16	...	4.4	4.7	4.8	4.8	4.9	4.7	4.7	4.8	4.8	4.4	...	...
17	...	4.4	4.7	4.6	4.7	4.8	4.7	4.7	4.6	4.5	4.3	...	...
18	...	4.5	4.6	4.7	4.6	4.8	4.7	4.8	4.8	4.5	4.2	...	...
19	...	4.1	4.7	4.7	4.8	4.9	4.8	4.9	4.7	4.5	4.4	...	...
20	...	4.6	4.6	4.7	4.9	4.9	4.8	4.9	5.0	4.8	4.5	...	...
21	...	4.2	4.8	4.7	4.8	4.8	4.9	5.0	4.7	4.6	p4.5a	...	...
22	...	4.3	4.8	4.8	4.9	4.9	4.9	4.9	4.8	4.7	4.6	...	...
23	...	4.3	4.8	4.8	4.9	4.8	4.8	4.8	4.8	4.5	4.4	...	...
24	...	4.3	4.7	4.9	5.0	5.0	5.0	4.8	5.1	4.8	4.4	...	...
25	...	4.3	4.8	4.8	4.9	4.9	5.0	5.0	4.6	4.7	4.6	...	...
26	...	4.3	4.7	4.9	4.7	5.0	5.0	5.0	4.9	4.8	4.4	...	...
27	...	4.3	4.8	4.8	4.8	4.9	4.9	4.9	4.9	4.7	4.5	...	...
28	...	4.2	4.5	5.1	4.8	4.9	4.8	4.8	4.9	4.6	4.6	...	...
29	...	...	4.5	4.9	5.0	4.8	4.9	5.0	5.3	4.8	4.7	...	...
30	...	...	4.7	4.7	5.1	4.8	4.8	5.0	4.8	4.7	4.3	...	...
31													
* MEAN	...	4.3	4.7	4.8	4.9	4.9	4.9	4.9	4.8	4.6	4.4	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	240	240	230	230	220	230	230	240	220	240	...	...
2	...	240	220	220	220	220	210	210	210	215	230	...	...
3	...	240	230	220	210	210	220	210	210	230	240	...	...
4	...	240	230	230	220	220	200	200	200	220	240	...	...
5	...	240	230	230	220	210	210	200	220	220	p250c	...	...
6	...	250	240	230	220	220	210	200	220	230	230	...	...
7	...	240	230	220	220	210	210	200	210	230	230	...	...
8	...	240	240	220	210	210	210	220	220	220	210	...	...
9	...	230	240	230	220	210	210	210	210	210	220	...	...
10	...	240	230	230	220	210	210	210	210	220	200	...	...
11	...	250	250	200	230	230	220	210	220	230	230	...	...
12	...	240	240	230	p210	230	210	210	220	230	230	...	...
13	...	240	230	230	220	230	p220c	200	p200c	210	230	...	...
14	...	210	200	230	220	p250	220	p170	210	210	190	...	...
15	...	230	230	220	200	190	220	210	210	200	220	...	...
16	...	230	230	220	210	210	220	210	220	230	210	...	...
17	...	250	240	230	220	210	200	200	220	190	240	...	...
18	...	250	240	220	220	210	210	210	190	230	240	...	...
19	...	230	230	210	220	220	220	220	220	230	220	...	...
20	...	240	220	230	220	220	210	220	210	220	230	...	...
21	...	240	230	220	220	220	210	210	p220a	p230a	p240a	...	...
22	...	240	240	230	230	220	220	220	210	220	250	...	...
23	...	250	230	230	220	220	210	220	220	220	p230a	...	...
24	...	230	230	230	230	230	220	210	200	220	220	...	...
25	...	240	240	230	230	230	230	220	220	p230a	p240a	...	...
26	...	240	220	220	210	220	210	220	210	220	240	...	...
27	...	250	230	220	220	220	220	210	210	230	240	...	...
28	...	240	230	230	220	220	220	220	200	240	250	...	...
29	...	...	p230c	230	220	220	p210a	200	220	220	270	...	...
30	...	...	220	200	200	210	210	230	210	240	230	...	...
31													
* MEAN	...	239	231	224	219	218	214	210	213	222	231	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 190

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1941

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	1.1	1.2	1.8	1.7	1.8	2.0	1.8	1.7	1.2	1.0	0.6	0.6	2.0	2.7	3.1	3.5	3.5	3.7	3.8	3.8	3.5	2.8	2.7	2.4	1.0
2	0.6	0.8	1.1	1.8	1.8	1.8	1.9	1.7	1.7	1.3	1.2	1.0	0.6	2.2	2.8	3.2	3.5	3.8	3.8	3.8	3.6	3.5	3.2	2.6	2.4	1.2
3	1.0	1.0	1.0	1.8	1.7	1.9	1.8	1.8	1.7	1.0	1.1	0.9	0.8	2.2	2.8	3.1	3.5	3.8	3.8	4.0	3.7	3.5	3.2	2.8	2.3	1.0
4	0.7	1.0	1.0	1.7	1.7	1.8	1.8	1.8	1.7	1.1	1.1	1.0	0.6	2.3	2.9	3.0	3.6	3.5	3.8	3.7	3.8	3.6	3.3	2.8	2.2	1.2
5	0.6	1.0	1.0	1.7	1.8	1.7	1.8	1.8	1.8	1.7	p1.4c	1.2	p0.7c	2.1	2.8	3.1	3.5	3.7	3.8	4.0	3.8	3.7	3.3	p2.8c	2.3	1.3
6	...c	...c	...c	1.8	1.8	2.1	1.8	2.0	1.8	1.2	1.2	0.6	0.6	p2.4c	3.3	3.2	3.6	3.6	4.0	3.8	3.8	3.7	3.3	2.8	2.1	1.2
7	0.8	1.1	1.1	p1.7	1.8	1.7	1.7	1.7	1.8	1.0	1.0	p1.2c	p0.9c	2.2	2.7	3.1	3.6	3.8	3.8	3.7	3.7	3.6	2.7	2.7	2.4	p1.2c
8	0.7	0.9	1.1	1.0	1.0	1.3	1.8	1.8	1.7	1.2	1.1	1.0	0.6	2.1	2.7	3.2	3.5	3.7	3.8	3.8	3.7	3.5	3.1	2.8	2.3	1.1
9	1.0	1.0	1.2	1.2	1.7	1.7	1.8	1.7	1.7	1.2	1.0	0.8	0.7	2.2	2.8	3.2	3.5	3.7	3.7	4.0	3.7	3.5	3.2	2.8	2.3	1.2
10	0.7	1.1	1.2	1.0	1.8	1.8	1.9	1.8	1.8	1.7	1.1	1.0	0.6	2.2	2.8	3.2	3.4	3.8	3.8	3.8	3.8	3.4	3.1	2.8	2.2	1.2
11	0.7	0.9	1.1	1.0	1.8	1.8	1.7	1.8	1.7	1.3	1.1	0.8	0.6	2.1	2.9	3.6	3.5	3.9	3.8	3.8	3.5	3.4	3.1	2.7	2.1	1.1
12	0.7	0.7	1.0	1.2	1.7	1.7	1.8	1.7	1.1	1.0	1.0	0.6	0.6	2.2	2.8	3.2	3.5	3.6	4.1	4.0	3.8	3.4	3.1	2.8	2.3	2.2
13	0.6	1.0	1.0	1.0	1.7	1.7	1.9	2.0	1.7	1.3	0.7	0.6	0.6	2.2	2.7	3.1	3.4	3.6	3.8	p3.6c	3.2	p3.2c	p3.2c	2.4	2.3	0.8
14	0.6	0.7	1.1	1.0	1.2	1.7	1.7	1.8	1.7	1.2	1.1	0.8	0.6	2.2	2.4	2.8	p3.4	3.7	p4.3	4.0	p3.7	3.1	2.8	2.5	1.2	0.8
15	0.8	1.0	1.0	1.0	1.1	1.7	1.8	1.8	1.8	1.7	1.1	1.0	0.7	2.1	3.0	3.1	3.6	3.6	3.4	3.9	3.8	3.4	3.2	2.8	2.3	1.3
16	0.6	0.9	0.9	1.0	1.7	1.7	1.6	1.7	1.1	0.9	1.0	0.8	0.7	2.2	2.7	3.0	3.5	3.5	3.8	3.8	3.8	3.6	3.1	2.6	2.0	1.2
17	0.8	0.9	0.8	1.0	1.0	1.1	1.7	1.7	1.7	1.0	1.0	0.8	0.8	2.1	2.5	3.0	3.3	3.5	3.7	3.7	3.8	3.5	3.1	2.9	2.1	1.1
18	0.6	0.9	1.0	1.2	1.1	1.7	1.7	1.7	1.4	1.2	1.6	0.9	0.8	2.1	1.9	3.2	3.4	3.7	3.8	3.5	3.7	3.5	3.2	3.1	2.2	1.4
19	0.7	0.9	0.9	1.2	1.7	1.8	1.7	1.7	1.7	1.2	1.1	0.9	p0.6	1.4	2.6	2.7	3.5	3.4	3.9	3.9	3.5	3.3	3.2	2.8	2.3	1.4
20	0.6	0.9	1.1	1.2	1.2	1.7	1.7	1.7	1.7	1.2	1.0	0.6	0.7	2.1	2.9	3.1	3.5	3.8	3.9	3.8	3.8	3.7	3.2	2.8	2.4	1.7
21	0.6	0.6	1.1	1.2	1.7	1.8	1.9	1.8	1.4	1.2	p1.0	0.6	0.6	2.2	2.8	3.2	3.5	3.6	3.8	4.0	3.9	p4.1a	p4.0a	p6.4a	2.4	1.8
22	0.7	1.0	1.1	1.1	1.7	1.9	1.8	1.7	1.8	1.2	0.9	0.6	0.6	2.1	2.8	3.2	3.5	3.8	4.1	3.7	3.8	3.7	3.0	2.7	2.8	1.7
23	0.6	0.8	1.0	1.2	1.3	1.8	1.8	1.7	1.3	1.7	1.1	0.8	0.6	2.2	2.8	3.2	3.5	3.8	3.8	3.9	3.8	3.5	3.4	p2.9a	2.4	1.5
24	0.6	0.6	1.1	1.2	1.2	1.8	1.7	1.7	1.4	1.1	1.1	0.9	0.8	2.2	2.8	3.2	3.5	3.8	3.9	3.9	3.5	3.5	3.3	2.8	2.4	1.4
25	0.6	0.9	1.1	1.8	1.9	2.0	2.0	1.9	1.8	1.8	1.2	1.1	0.8	2.4	2.8	3.3	3.6	3.9	3.9	3.8	3.8	3.6	p3.6a	3.7	2.8	1.4
26	0.6	0.8	1.2	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.1	0.8	1.0	2.2	2.9	3.2	3.6	3.8	4.0	3.9	3.8	3.7	3.4	3.2	2.4	2.0
27	0.8	1.0	1.2	1.8	1.8	1.9	1.8	1.8	1.8	1.2	1.2	1.1	0.8	2.2	2.8	3.2	3.6	3.8	3.9	4.0	3.8	3.6	3.3	3.0	2.4	1.4
28	0.7	0.8	1.0	1.0	2.0	1.7	1.6	1.9	1.2	1.0	1.0	0.8	0.8	2.2	2.8	3.2	3.5	3.9	3.7	3.9	4.0	3.4	3.3	2.5	2.8	1.4
29	0.7	p0.9c	p1.3c	2.2	2.1	2.2	2.0	2.0	1.8	1.7	2.8	1.0	0.7	2.0	p2.8c	p3.2c	3.8	4.0	4.1	4.1	4.0	3.8	3.3	3.5	2.7	1.5
30	0.6	1.0	1.0	1.0	1.7	1.7	1.8	1.8	1.7	1.1	1.1	0.6	0.6	2.1	2.8	3.2	3.6	3.9	4.1	4.0	4.1	3.7	3.6	2.8	2.4	1.4
31																										
MEAN*	0.7	0.9	1.1	1.4	1.6	1.8	1.8	1.8	1.6	1.3	1.1	0.9	0.7	2.2	2.8	3.1	3.5	3.7	3.9	3.8	3.8	3.5	3.2	2.9	2.3	1.3

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 191

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1941 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND DECEMBER 1941

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	4.6	4.6	4.1	3.3	2.8	3.3	7.3	9.8	9.6	10.0	10.7	11.1	11.6	12.1	11.2	10.9	9.0	9.5	9.1	9.1	8.0	7.8	7.7	p5.8f	8.0
2	p4.5f	p4.4f	p4.0f	p3.2f	p2.6f	3.0	7.4	9.6	11.0	12.0	12.8	13.3	13.8	13.8	14.3	13.6	13.2	13.0	9.5	8.8	7.9	7.7	8.1	8.2	9.2
3	7.3	6.5	5.2	2.8	2.0	3.5	7.3	9.3	10.0	10.0	9.2	9.3	9.3	9.9	11.1	11.5	11.8	11.4	11.4	11.9	9.2	9.8	9.5	7.5	8.6
4	5.5	4.4	p4.2f	p4.0f	4.0	4.1	7.2	8.9	9.0	8.7	8.9	9.0	9.2	10.4	10.9	p11.6c	12.3	12.5	12.7	11.6	10.3	9.8	9.4	9.0	8.6
5	6.5	p4.3f	p4.2f	p4.1f	p4.2f	4.3	7.7	9.6	10.3	10.1	9.1	8.8	9.2	10.2	11.3	12.1	11.9	12.4	12.2	11.7	11.6	10.6	10.4	9.2	9.0
6	6.9	6.3	6.5	6.1	4.8	3.6	7.0	9.2	10.1	9.3	8.5	8.6	9.3	10.0	10.5	10.8	10.9	11.0	11.5	11.3	10.2	9.6	9.3	7.8	8.7
7	5.8	4.5	4.0	3.9	3.0	3.4	7.3	9.0	10.0	10.3	10.5	9.0	8.5	8.8	9.5	10.1	10.3	10.3	10.4	9.6	8.2	7.0	5.9	5.9	7.7
8	4.6	4.5	4.4	4.3	3.8	3.6	6.8	8.6	10.1	10.8	10.5	9.3	9.4	9.6	10.1	10.6	10.9	11.7	11.1	10.6	10.2	9.7	8.6	6.8	8.4
9	5.4	4.0	3.2	2.5	p2.0f	p2.5f	6.7	8.1	10.2	10.9	11.4	11.3	10.1	8.3	8.1	8.5	8.9	10.0	10.9	11.0	10.3	9.0	8.2	7.2	7.9
10	6.1	6.5	5.4	4.4	4.0	4.1	6.7	8.5	9.5	10.3	10.4	9.3	9.0	8.9	8.3	8.2	7.9	7.9	8.2	8.2	7.9	7.7	8.0	7.2	7.6
11	6.7	6.1	6.0	5.2	4.8	5.7	7.1	8.3	9.8	9.7	9.3	9.5	10.2	11.0	11.2	11.3	11.9	11.7	11.3	9.2	8.4	6.9	7.3	7.3	8.6
12	6.6	6.1	p5.9f	p5.8f	5.7	5.6	7.1	8.8	10.2	11.1	10.9	9.6	9.2	9.7	10.5	11.7	12.0	12.1	12.2	11.9	10.1	8.2	8.4	7.0	9.0
13	6.5	5.8	5.7	5.0	4.4	4.1	7.0	8.6	10.5	10.6	11.6	11.9	11.9	11.5	12.6	12.9	12.6	12.4	12.8	13.1	12.7	10.3	9.1	6.9	9.6
14	p6.8b	p7.0b	p7.0b	p5.3f	p4.5f	4.2	6.7	8.6	10.1	9.9	10.0	9.6	9.7	9.8	9.5	9.4	9.2	9.6	10.1	10.2	9.3	9.3	8.9	7.8	8.4
15	7.0	6.4	6.1	5.7	p5.4f	p5.3f	6.3	8.8	10.2	10.5	10.2	9.2	9.1	9.8	10.2	10.5	10.5	10.7	10.9	10.7	10.4	9.2	7.3	6.3	8.6
16	5.5	p5.2f	p5.0f	p4.8f	p2.1f	2.5	6.0	8.6	9.4	9.6	8.7	8.7	8.8	8.7	9.7	9.5	9.8	10.2	10.6	10.9	10.0	8.6	p7.3f	5.8	7.8
17	4.8	p4.6f	4.5	4.4	4.1	4.7	7.0	9.1	9.5	9.5	8.6	8.0	8.0	8.6	9.4	10.2	11.3	11.1	11.0	10.8	9.7	8.3	7.0	6.0	7.9
18	4.8	4.2	4.3	4.4	3.7	2.8	6.4	8.5	9.4	9.7	9.7	9.0	9.6	10.9	12.2	11.9	12.0	11.5	11.0	11.0	10.2	8.3	5.8	4.7	8.2
19	4.8	4.4	4.2	3.2	2.5	2.6	6.0	8.3	9.7	10.3	10.0	9.1	9.3	10.0	10.5	11.1	11.2	11.2	11.0	10.3	8.6	6.0	p4.6f	p4.4f	7.6
20	...f	...f	...f	...f	...f	3.4	6.5	8.2	9.8	10.2	9.8	9.1	8.9	9.5	10.0	11.1	11.3	10.8	11.2	11.4	10.4	8.2	6.6	5.9	...
21	4.6	4.3	p4.1f	p3.0f	p2.9f	3.4	6.7	8.7	9.9	10.3	10.8	10.8	11.0	10.0	10.7	10.8	11.3	11.4	11.4	10.7	9.7	7.5	6.9	6.2	8.2
22	p4.8f	p4.2f	p4.0f	p3.0a	p3.0a	3.5	6.3	8.2	9.2	9.2	9.6	9.3	8.5	8.7	9.4	10.0	10.5	11.5	11.2	10.7	9.6	8.5	7.2	5.9	7.8
23	4.4	...f	...f	...f	...f	2.5	5.6	7.7	9.3	10.0	10.7	9.6	8.7	8.6	p8.8c	9.1	9.3	9.6	10.3	9.9	9.0	7.3	6.3	4.6	...
24	3.5	2.6	2.4	2.6	p2.4f	2.6	6.1	8.5	10.7	10.9	10.9	11.1	10.9	9.2	8.6	8.5	9.3	10.2	10.7	11.1	9.9	9.3	9.3	8.1	7.9
25	6.0	4.8	4.4	4.3	4.2	3.4	5.8	8.4	10.5	10.0	9.6	8.9	8.9	9.0	9.4	10.0	10.1	9.9	10.2	9.7	8.6	8.0	7.2	4.8	7.8
26	4.5	...f	...f	...f	...f	2.4	5.4	8.5	9.6	9.8	p10.7b	11.7	11.0	10.5	10.0	9.7	9.2	8.7	8.3	8.3	p7.6f	6.9	6.7	5.7	...
27	5.2	5.5	4.5	p4.2f	p3.6f	p3.3f	5.7	8.3	9.2	10.1	11.0	11.8	12.2	12.7	12.4	12.5	12.7	12.4	11.6	9.8	7.7	6.3	5.6	4.9	8.5
28	4.8	4.4	4.3	p3.7f	p3.2f	2.7	5.8	7.8	9.5	10.5	10.7	11.3	11.2	11.4	11.8	11.9	11.9	11.5	11.1	10.4	7.5	p7.8f	6.2	6.7	8.3
29	6.6	5.7	4.8	4.4	3.8	3.5	5.6	7.7	9.0	9.6	10.0	10.0	10.1	11.0	11.7	12.0	11.8	11.2	10.8	10.3	9.5	9.2	9.1	7.9	8.6
30	6.1	5.7	5.4	5.3	4.6	4.0	5.2	7.4	9.1	9.6	10.7	10.8	11.2	11.1	11.9	11.7	11.3	10.8	10.2	9.4	8.6	8.0	8.0	7.8	8.5
31	6.6	5.5	4.7	4.3	4.1	3.7	5.8	7.7	9.3	9.5	9.2	8.7	8.6	9.9	10.9	11.2	11.4	10.9	11.0	10.5	8.7	7.8	7.4	6.4	8.1
MEAN*	5.6	5.1	4.7	4.2	3.6	3.6	6.5	8.6	9.8	10.1	10.2	9.9	9.9	10.1	10.5	10.8	10.9	10.9	10.8	10.5	9.4	8.3	7.6	6.6	8.3

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 192

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	330	260	270	300	260	320	270	260	290	350	340	340	330	330	350	350	330	280	270	310	350	360	390	400	318
2	380	300	280	270	340	340	250	260	290	300	320	350	340	340	340	330	320	240	280	320	360	370	310	260	312
3	260	260	220	240	240	270	250	280	320	370	390	350	340	360	360	330	340	260	280	320	380	320	320	400	311
4	420	430	440	350	270	260	260	300	320	300	380	380	360	380	360	q340c	310	260	280	310	310	310	360	360	335
5	400	440	440	350	340	280	260	290	300	360	350	330	320	370	340	320	310	260	280	300	310	300	290	320	328
6	320	340	340	210	240	270	250	290	300	360	370	370	400	380	330	310	350	270	270	280	330	330	300	280	316
7	310	330	320	250	250	250	250	280	300	350	360	390	390	390	390	330	300	260	280	330	380	400	400	360	327
8	310	330	300	250	230	240	250	280	300	320	330	350	380	380	380	350	330	260	280	280	260	280	230	230	297
9	240	230	240	270	330	290	260	280	300	310	350	350	350	400	390	370	350	250	260	280	270	270	270	250	298
10	250	270	290	320	260	250	250	270	310	320	390	380	360	380	380	380	350	250	270	260	280	260	240	240	300
11	270	320	360	360	330	260	250	280	310	340	350	380	380	370	340	360	330	230	270	290	330	390	370	310	324
12	290	310	290	280	260	250	270	280	320	330	350	380	380	400	380	350	330	250	230	290	340	360	320	290	314
13	290	270	270	250	250	250	250	270	290	330	350	360	360	360	350	360	390	260	260	310	330	290	360	470	314
14	530	q520b	q510b	510	370	250	260	280	300	340	350	350	350	360	370	370	320	260	270	260	260	290	300	300	345
15	300	290	280	320	300	270	260	280	300	340	340	350	370	370	360	340	330	260	270	250	270	320	350	350	311
16	320	380	450	480	470	330	260	290	310	380	370	380	370	360	380	330	330	260	260	270	300	310	380	370	348
17	310	340	290	260	260	240	250	280	310	330	360	350	380	350	360	320	330	230	280	290	320	360	390	380	315
18	310	330	290	250	220	260	260	290	300	340	350	370	370	350	330	330	330	260	280	280	340	400	410	400	319
19	360	310	240	260	250	270	260	280	310	340	370	350	380	350	360	350	350	250	280	300	350	450	470	480	332
20	470	460	360	380	350	240	250	280	300	320	370	370	340	380	380	350	340	240	250	290	320	370	420	410	343
21	380	400	400	370	270	240	250	290	300	340	360	380	370	380	370	340	340	260	270	280	300	370	350	330	331
22	300	350	330	350	240	260	280	290	320	340	410	390	400	360	350	350	310	270	270	260	310	330	330	320	322
23	380	...f	...f	...f	...f	320	250	310	300	350	360	380	360	360	q350f	350	340	260	260	270	280	260	320	280	...
24	280	310	360	360	320	280	260	300	290	310	350	340	400	340	400	320	300	260	270	270	270	250	280	300	309
25	320	350	380	370	330	300	260	290	300	340	350	380	380	350	350	330	300	250	270	280	340	380	400	370	332
26	360	...f	...f	...f	...f	330	260	280	280	350	q350b	350	360	400	370	350	320	240	280	290	290	280	380	320	...
27	280	280	310	350	320	310	260	290	300	340	340	350	360	380	340	360	350	270	270	310	340	390	350	330	324
28	310	330	300	380	380	350	260	310	300	340	360	370	380	370	380	340	330	260	280	320	350	360	370	300	335
29	260	270	260	250	280	350	260	290	290	340	360	360	370	350	350	350	370	260	270	280	260	270	250	240	300
30	230	240	250	280	300	380	270	300	320	340	330	360	380	340	340	300	340	270	270	270	300	300	310	270	304
31	260	250	280	250	250	260	270	290	300	350	380	390	360	360	340	330	370	240	280	300	310	330	310	300	307
MEAN*	324	328	323	318	294	283	258	285	303	338	358	364	367	366	360	342	334	256	271	289	314	331	340	330	320

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 193

DECEMBER 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1941

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												MINIMUM VIRTUAL HEIGHT OF F1 REGION											
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.5	4.9	4.8	4.9	4.9	4.8	4.7	4.9	4.7	4.4	...	...	...	260	240	240	230	220	210	220	240	240	240	...	...
2	...	4.2	4.5	4.8	5.2	5.1	5.0	4.9	5.0	4.8	4.3	...	...	...	240	240	240	270	230	230	210	220	220	230	...	...
3	...	4.3	4.7	4.9	5.2	4.9	4.8	4.7	5.0	4.9	4.9	...	...	...	230	230	230	220	220	210	170	200	210	230	...	...
4	...	4.5	4.8	4.7	4.9	4.8	4.8	5.0	5.0	p4.6c	p4.3c	...	...	...	240	230	200	200	210	200	210	190	220	p240c	...	...
5	...	4.2	4.6	5.1	4.8	4.8	4.6	4.9	4.8	4.5	4.3	...	...	...	230	230	220	200	200	190	200	190	230	220	...	...
6	...	4.2	4.6	5.2	4.9	5.0	5.2	4.8	4.5	4.6	4.2	...	...	...	250	230	220	210	210	190	190	200	210	220	...	...
7	...	4.2	4.7	4.8	4.9	5.0	4.9	4.8	4.8	4.6	4.1	...	...	...	240	230	230	230	220	220	210	210	210	210	...	...
8	...	4.3	4.7	4.7	4.8	4.9	4.9	4.9	4.8	4.7	4.5	...	...	...	240	230	220	220	220	220	210	220	220	230	...	...
9	...	4.2	4.5	4.5	4.7	4.8	4.8	4.9	5.0	4.8	4.5	...	...	...	240	220	220	210	220	210	200	210	220	210	...	...
10	...	4.2	4.6	4.7	5.2	4.7	4.8	4.8	4.7	4.7	4.5	...	...	...	240	230	220	210	220	220	210	220	210	200	...	...
11	...	4.3	4.7	4.8	4.9	5.0	4.9	4.9	4.8	4.6	4.3	...	...	...	240	230	220	220	210	220	220	p220a	220	230	...	...
12	...	4.3	4.8	4.7	4.7	4.8	4.8	5.0	4.7	4.7	4.5	...	...	...	250	p230a	210	200	210	190	220	230	240	250	...	...
13	...	4.1	4.6	4.7	4.9	4.9	4.8	4.8	4.7	4.7	4.5	...	...	...	240	230	230	220	210	210	200	200	250	250	...	...
14	...	4.2	4.6	4.8	4.8	4.8	4.8	4.7	4.5	4.4	4.4	...	...	...	240	240	230	230	220	210	210	210	210	240	...	...
15	...	4.2	4.6	4.8	4.8	4.8	4.7	4.8	4.8	4.7	4.4	...	...	...	240	220	230	210	210	210	220	200	220	220	...	...
16	...	4.2	4.7	4.8	4.8	4.8	4.8	4.9	4.7	4.7	4.4	...	...	...	240	230	230	220	230	210	210	220	210	210	...	...
17	...	4.2	4.7	4.8	5.0	4.8	5.0	5.0	4.8	4.8	4.5	...	...	...	240	230	210	220	210	200	200	200	220	240	...	...
18	...	4.7	4.7	5.0	5.0	4.9	5.1	4.9	4.8	4.7	4.4	...	...	...	240	240	230	220	220	210	210	220	230	220	...	...
19	...	4.2	4.7	4.9	5.0	4.8	5.0	4.8	4.8	4.9	4.6	...	...	...	230	230	220	220	220	210	210	200	220	220	...	...
20	...	4.4	4.7	4.7	4.8	4.8	4.8	4.8	4.7	4.7	4.4	...	...	...	230	220	210	200	200	200	210	220	230	230	...	...
21	...	4.2	4.6	4.8	4.8	4.9	4.9	4.9	5.0	4.7	4.5	...	...	...	240	230	220	210	220	200	210	220	210	p230a	...	...
22	...	4.4	4.5	4.8	5.1	4.9	5.0	4.8	4.7	4.9	4.5	...	...	...	230	220	230	220	220	210	200	200	180	240	...	...
23	...	4.8	4.8	4.9	4.9	4.9	4.8	4.9	p4.9c	4.9	4.7	...	...	...	250	180	220	230	220	200	210	p210c	210	200	...	...
24	...	4.7	4.7	4.8	4.9	4.9	5.0	4.8	5.0	4.6	4.5	...	...	...	250	230	210	230	220	210	220	210	210	210	...	...
25	...	4.8	4.8	4.9	5.0	5.0	5.0	4.9	4.8	4.6	4.1	...	...	...	240	240	210	210	210	200	210	210	200	200	...	...
26	...	4.3	4.6	5.3	p5.1b	4.9	4.9	5.0	4.8	4.8	4.5	...	...	...	240	180	210	p220b	220	210	200	210	220	200	...	...
27	...	4.8	5.1	5.0	5.0	5.0	5.0	4.8	4.7	4.7	4.7	...	...	...	230	240	230	230	210	240	210	200	p210	210	...	...
28	...	4.8	4.8	4.9	5.0	4.9	4.8	4.7	4.9	4.7	4.6	...	...	...	240	240	240	220	220	210	210	210	210	200	...	...
29	...	4.4	4.6	4.8	5.0	5.0	5.0	4.9	4.7	4.9	4.9	...	...	...	230	230	230	220	230	230	220	200	210	220	...	...
30	...	4.8	4.8	4.8	4.8	5.0	5.1	4.9	4.8	4.7	4.8	...	...	...	230	230	220	210	220	210	210	200	220	220	...	...
31	...	4.3	4.6	4.9	5.0	5.0	5.0	5.1	4.9	4.6	5.2	...	...	...	230	230	220	210	230	230	210	210	210	200	...	...
*MEAN	...	4.4	4.7	4.8	4.9	4.9	4.9	4.9	4.8	4.7	4.5	...	...	...	239	228	223	218	217	210	208	210	217	222	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 194

DECEMBER 1941 DECEMBER 1941

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.7	1.1	1.1	2.0	2.1	1.8	1.9	1.9	1.6	1.2	1.2	0.8	0.7	2.6	3.1	3.0	3.8	3.8	3.9	3.8	3.8	3.6	3.2	2.8	2.4	1.6
2	0.6	1.1	1.0	1.1	1.9	1.2	1.7	1.1	1.3	1.1	0.9	0.6	0.7	2.1	2.8	3.2	4.0	4.4	4.3	4.2	3.9	3.6	3.3	2.7	2.4	1.6
3	0.6	1.0	1.1	1.1	1.2	1.7	1.0	1.1	1.8	1.7	1.0	0.6	0.6	2.1	2.8	3.2	3.6	3.8	3.8	3.7	4.0	3.8	3.5	2.7	2.3	1.4
4	0.6	0.8	1.0	1.8	1.6	1.8	1.7	1.0	1.6	p1.4c	1.1	0.6	0.6	2.1	2.8	3.2	3.8	3.5	3.8	4.1	3.8	3.8	p2.8c	1.8	1.9	1.7
5	0.6	0.6	1.0	1.7	1.8	1.7	2.0	1.8	1.7	1.1	1.0	1.0	0.6	2.0	2.7	3.0	3.5	3.8	3.9	4.0	4.0	3.5	3.4	3.1	2.2	1.5
6	0.6	0.9	1.1	1.7	1.7	1.7	1.8	1.7	1.7	1.3	1.0	0.6	0.6	2.2	2.8	3.2	3.5	3.8	3.8	4.1	3.7	3.7	3.2	2.9	2.5	1.4
7	0.6	0.6	1.2	1.2	1.7	1.8	1.1	1.2	1.2	1.2	1.1	0.7	0.8	2.1	2.9	3.2	3.4	3.8	3.8	4.0	3.8	3.5	3.3	2.9	2.4	1.6
8	0.6	1.0	1.0	1.2	1.1	1.3	1.3	1.2	1.1	1.2	1.2	0.7	0.7	2.0	2.8	3.0	3.5	3.8	3.7	3.8	3.8	3.5	3.3	2.8	2.4	1.5
9	0.8	1.0	1.1	1.2	1.2	1.3	1.7	1.2	1.2	1.1	1.0	1.1	0.7	2.2	2.8	3.2	3.5	3.5	3.7	3.8	3.8	3.6	3.2	2.9	2.4	1.4
10	0.8	1.1	1.1	1.1	1.2	1.2	1.3	1.2	1.2	1.2	1.0	0.7	0.7	2.1	2.8	3.0	3.3	3.5	3.8	3.9	3.8	3.5	3.1	2.7	2.4	1.5
11	0.6	0.8	1.0	1.1	1.1	1.1	1.7	1.7	1.2	1.2	1.0	0.8	0.7	2.1	2.8	3.2	3.4	3.8	3.8	4.0	4.2	p3.8a	3.5	2.8	2.6	1.6
12	0.6	1.0	1.0	1.1	1.7	1.8	1.7	1.8	1.6	1.1	1.0	1.0	0.6	1.4	2.8	3.8	3.5	3.8	3.9	3.9	3.9	3.7	3.5	2.6	2.0	1.2
13	0.6	0.7	0.9	1.2	1.2	1.7	1.9	1.8	1.7	1.7	1.1	1.1	0.7	2.3	2.8	2.7	3.8	3.8	3.8	3.9	3.8	3.5	3.8	3.2	2.4	1.9
14	0.8	0.7	1.0	1.0	1.3	1.7	1.2	1.8	1.2	1.1	1.1	0.8	0.7	2.2	2.7	3.2	3.4	3.5	3.8	3.9	3.8	3.7	3.2	2.8	2.5	1.6
15	0.6	0.8	1.0	1.2	1.2	1.8	1.8	1.7	1.7	1.1	1.0	0.8	0.8	2.1	2.9	3.0	3.6	3.5	3.8	4.0	3.6	3.5	3.2	2.8	2.4	1.6
16	0.6	1.0	1.0	1.2	1.2	1.8	1.8	1.7	1.1	1.1	1.1	0.6	0.6	2.0	2.7	2.8	3.4	3.5	3.7	3.7	3.5	3.4	3.2	2.8	2.3	1.5
17	0.8	0.6	1.0	1.1	1.1	1.7	1.3	1.7	1.2	1.1	1.1	0.6	0.6	2.0	2.8	3.2	3.4	3.8	3.8	3.8	3.9	3.5	3.2	2.8	2.1	1.6
18	0.7	0.6	0.8	1.0	1.2	1.2	1.8	1.7	1.7	1.2	1.0	0.7	0.6	0.8	2.2	2.8	3.2	3.4	3.8	4.0	4.1	3.8	3.6	3.7	3.1	2.5
19	0.6	0.8	1.0	1.0	1.1	1.2	1.1	1.2	1.2	1.7	0.9	0.6	0.6	2.0	2.8	3.1	3.4	3.6	3.8	3.8	4.0	3.1	3.5	2.9	2.6	1.8
20	0.6	1.0	1.0	1.1	1.6	1.8	1.7	1.7	1.2	1.0	1.0	0.8	0.8	1.9	2.6	3.1	3.4	3.7	3.8	4.0	3.7	3.6	3.3	2.8	2.4	1.6
21	0.6	0.6	1.0	1.1	1.1	1.1	1.1	1.2	1.0	1.2	1.0	0.8	0.6	2.1	2.8	3.3	3.2	3.6	3.8	3.8	3.6	3.6	2.8	3.8	2.6	1.6
22	0.6	0.7	0.8	1.1	1.0	1.1	1.1	1.2	1.0	1.2	1.0	1.0	0.8	1.8	2.7	2.6	3.1	3.4	3.6	3.7	3.5	4.3	3.7	3.2	2.4	1.6
23	0.6	0.7	1.0	1.0	1.1	1.3	1.2	1.2	p1.2	1.1	1.1	1.0	0.6	2.0	3.0	3.1	3.3	3.6	3.7	3.7	3.5	p3.3c	3.1	2.8	2.4	1.7
24	1.1	0.6	1.1	1.1	1.1	1.1	1.1	1.3	1.2	1.2	1.0	0.6	0.6	2.0	2.7	3.1	3.3	3.5	3.7	3.8	3.7	3.5	3.2	2.9	2.5	1.8
25	0.6	0.8	1.1	1.1	1.2	1.7	1.7	1.7	1.7	1.2	1.1	1.0	0.8	2.0	2.7	3.2	3.2	3.5	3.7	3.7	3.7	3.5	3.3	3.9	2.6	1.8
26	0.6	0.8	1.0	1.1	1.2	1.2	1.7	1.2	p1.2	1.2	0.9	0.8	0.6	2.0	2.6	3.0	4.0	p4.0b	4.1	3.8	3.5	3.7	3.1	2.8	2.2	1.6
27	0.6	1.0	1.1	1.2	1.7	1.7	1.7	1.3	1.2	1.2	1.0	1.0	0.7	1.9	2.7	3.3	3.4	3.8	4.0	4.4	4.0	3.7	p3.8	3.1	2.8	2.1
28	0.6	0.8	1.0	1.2	1.7	1.3	1.2	1.2	1.1	1.0	0.9	0.7	0.6	2.0	2.8	3.1	3.5	3.7	3.8	3.8	3.6	3.6	3.2	3.0	2.6	1.6
29	0.6	0.6	1.0	1.0	1.1	1.2	1.7	1.2	1.2	1.1	1.0	0.8	0.8	2.0	2.7	3.1	3.3	3.7	4.0	4.1	3.8	3.8	3.2	2.9	2.6	1.8
30	0.6	0.8	1.2	1.2	1.2	1.3	1.9	1.8	1.8	1.2	1.1	1.0	0.7	1.8	2.5	3.0	3.3	3.7	4.0	4.0	3.8	3.8	3.4	2.8	2.4	1.8
31	0.6	0.8	1.1	1.1	1.2	1.2	1.1	1.4	1.2	1.1	1.0	0.8	0.8	1.0	1.2	1.9	3.6	3.7	3.8	3.9	3.8	3.7	3.5	3.0	2.6	1.7
*MEAN	0.7	0.8	1.0	1.2	1.4	1.5	1.5	1.4	1.4	1.2	1.0	0.8	0.7	2.0	2.7	3.1	3.5	3.7	3.8	3.9	3.8	3.6	3.3	2.9	2.4	1.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 195

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1942 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JANUARY 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	5.6	...c	...c	...c	...c	...c	5.8	8.5	9.7	8.2	9.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
2	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.3	11.1	12.4	13.0	12.4	12.5	12.3	11.4	11.1	11.6	11.3	9.5	7.6	7.0	5.3	...
3	4.3	3.4	3.4	3.6	3.4	2.7	5.9	8.8	10.5	11.4	11.0	10.2	9.3	9.5	10.0	10.2	10.5	11.1	11.5	11.4	11.0	10.7	8.6	7.2	8.3
4	6.2	p4.9f	p4.3f	p3.8f	p3.2f	2.7	5.8	8.3	9.9	10.4	10.6	10.3	10.4	11.0	10.8	11.5	11.4	12.0	12.2	12.2	10.8	9.9	9.7	8.5	8.8
5	7.5	8.0	7.1	6.2	5.7	3.4	6.0	8.6	10.2	9.8	8.4	7.4	8.0	8.4	8.9	9.6	11.1	11.5	10.7	10.8	9.6	7.9	8.0	6.9	8.3
6	5.0	p4.8f	4.4	4.3	3.4	2.4	6.1	8.7	10.5	10.7	10.0	8.4	p8.6	8.7	9.1	10.3	10.8	10.9	11.4	10.9	10.2	9.2	8.6	8.1	8.1
7	...c	...c	...c	...c	...c	...c	...c	8.7	10.3	11.5	12.2	11.9	11.5	11.7	11.8	12.4	11.9	12.3	11.9	11.5	10.0	7.2	p7.2f	p6.1f	...
8	p5.0f	p4.6f	p4.2f	p3.8f	3.4	2.6	5.6	8.1	9.5	10.3	10.3	8.7	8.4	8.9	9.0	9.4	10.5	11.3	11.3	11.1	9.7	8.5	7.6	6.8	7.9
9	p6.2f	p5.5f	p4.9f	4.2	3.4	1.7	6.0	8.5	9.6	10.0	10.5	9.3	8.7	9.6	9.6	p9.8c	10.0	10.8	11.0	10.4	9.2	8.2	8.2	7.3	8.0
10	6.4	5.2	5.0	4.7	4.4	4.3	6.4	8.4	9.4	11.2	11.5	8.4	8.0	8.7	9.3	9.6	10.0	10.9	11.4	10.5	9.7	9.5	9.6	6.5	8.4
11	6.7	6.0	5.2	5.0	4.4	p4.5f	5.5	8.3	9.6	10.3	10.2	8.4	8.1	7.7	7.8	8.4	9.2	10.0	10.4	10.2	9.4	8.9	8.1	7.5	7.9
12	6.8	5.4	4.5	4.1	3.7	2.6	5.8	8.0	9.1	9.9	9.8	8.8	8.3	8.1	p8.2b	8.3	8.8	9.3	9.7	9.5	8.3	7.8	8.0	7.8	7.5
13	7.2	5.3	3.6	2.4	2.1	2.1	5.5	8.2	9.2	10.1	10.1	8.9	p8.6b	8.4	8.4	p8.7c	p9.6c	10.5	11.0	9.8	7.8	p6.6f	p5.4f	p5.2f	7.3
14	p5.0f	p5.0f	4.7	4.1	3.4	3.5	5.0	7.8	8.5	10.3	10.1	10.4	10.2	9.2	8.8	9.0	9.3	9.5	10.1	10.2	10.0	9.6	9.0	7.7	7.9
15	6.1	4.8	4.7	4.7	4.0	3.0	p4.8c	p6.6c	p8.4c	10.1	10.0	10.0	10.0	10.3	9.8	9.6	8.4	8.3	8.7	8.1	6.2	p5.1f	p5.2f	6.6	7.2
16	7.0	7.0	5.8	5.1	3.9	3.5	5.5	7.7	9.3	10.1	11.1	10.7	9.0	8.8	9.5	10.1	10.5	11.1	11.0	10.3	9.0	8.5	8.3	8.1	6.4
17	6.5	4.4	2.9	1.8	1.6	1.7	5.4	7.9	9.4	9.7	8.3	8.0	8.6	9.5	10.3	10.8	11.1	11.2	10.9	10.5	8.0	p6.5f	5.0	4.5	7.3
18	4.6	4.5	4.4	3.9	3.2	2.4	5.0	7.6	8.4	8.0	7.4	7.6	7.9	8.8	9.4	10.2	10.6	11.2	11.3	11.0	9.6	8.4	7.3	6.0	7.4
19	4.9	4.3	3.9	p4.5f	p3.4f	2.4	4.7	7.2	8.0	7.3	6.9	7.0	7.0	7.7	8.3	8.7	9.3	9.3	9.6	9.6	p7.2f	p6.4f	5.6	5.3	6.6
20	p4.4f	3.5	3.2	3.1	2.7	2.1	5.0	7.3	8.1	6.8	6.7	6.6	7.1	7.6	8.2	8.9	9.4	9.9	9.8	10.0	7.4	5.1	4.0	3.5	6.3
21	3.5	3.3	2.8	2.4	1.9	p3.5b	5.1	7.3	8.2	8.7	7.7	6.7	6.7	7.0	7.5	8.2	9.4	9.1	8.6	8.1	5.4	...f	...f	...f	...
22	...f	...f	...f	...f	...f	...f	4.6	7.2	8.0	8.4	7.1	7.3	7.9	8.0	8.4	8.8	8.8	9.0	8.8	8.6	7.2	6.4	5.3	6.2	...
23	...f	5.9	5.0	4.8	4.6	4.0	5.5	p7.1f	8.7	9.5	8.2	7.8	7.8	8.1	8.4	8.9	8.7	...c	...c	...c	...c	...c	...c	...c	...
24	p3.8c	3.9	3.9	3.0	2.2	p3.2c	4.2	p5.5c	p6.8c	8.1	p8.0c	p7.8c	7.7	8.4	9.2	9.9	9.9	10.1	10.5	9.7	8.5	7.1	6.3	5.7	6.8
25	4.5	3.4	2.6	2.4	2.2	2.1	4.6	7.0	8.3	8.9	7.6	7.0	6.9	7.0	7.4	7.6	7.8	7.7	8.3	7.6	5.9	...f	...f	...f	...
26	...f	...f	3.6	4.1	4.0	3.8	4.5	6.8	7.8	7.6	7.1	7.1	7.4	7.6	8.3	8.2	8.1	8.0	8.4	9.1	8.1	7.1	6.7	6.1	...
27	6.0	5.7	5.5	4.3	3.0	2.5	4.6	6.9	8.3	8.4	9.6	10.0	10.5	10.7	12.2	11.8	10.0	7.3	6.9	6.8	6.0	p5.7f	...f	...f	...
28	...f	...f	...f	...f	...f	...f	4.7	7.5	8.9	9.8	9.6	9.1	8.4	8.2	8.9	9.4	9.4	9.3	9.3	9.5	9.4	8.9	7.9	6.9	...
29	5.9	5.6	4.0	2.4	1.7	1.4	4.4	6.9	7.8	8.0	7.8	8.0	8.5	8.6	10.2	10.5	10.4	9.6	9.9	9.3	6.0	...f	...f	...f	...
30	...f	...f	3.8	3.7	3.1	2.2	4.6	6.8	7.6	8.2	8.2	8.6	8.9	9.8	11.1	10.7	10.9	10.8	10.7	10.5	8.9	7.7	6.5	6.0	...
31	5.6	5.0	4.7	4.0	2.3	1.5	4.5	7.2	8.1	8.4	9.2	9.3	9.6	10.6	11.3	12.2	11.9	10.8	10.7	9.8	4.2	...f	...f	...f	...
MEAN*	5.6	5.0	4.3	3.9	3.2	2.8	5.2	7.6	8.9	9.4	9.2	8.8	8.7	9.0	9.4	9.8	10.0	10.1	10.3	9.9	8.4	7.8	7.2	6.6	7.5

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 196

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1942 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JANUARY 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	310	...c	...c	...c	...c	...c	250	270	300	280	300	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
2	...c	...c	...c	...c	...c	...c	...c	...c	...c	320	350	330	330	330	330	330	370	250	280	260	280	250	230	230	...
3	250	250	260	290	320	300	280	280	310	330	360	370	360	360	380	340	350	250	260	260	280	270	270	290	303
4	330	370	380	370	320	300	250	270	290	340	350	360	360	350	380	370	340	250	270	280	250	290	290	280	318
5	310	310	290	290	230	230	260	230	290	330	390	380	450	400	380	350	330	300	270	270	300	350	330	340	317
6	350	360	350	310	250	260	260	280	300	360	350	360	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
7	...c	...c	...c	...c	...c	...c	...c	...c	...c	330	340	350	350	380	340	330	350	240	280	290	340	360	430	420	...
8	370	360	420	320	260	250	270	300	330	340	360	390	370	380	380	360	340	250	270	280	340	370	410	340	336
9	370	360	300	240	230	280	250	280	300	330	370	370	390	400	360	q330c	300	300	270	290	370	370	360	340	323
10	320	300	280	280	270	240	270	280	300	350	370	360	360	370	390	370	320	300	280	280	300	320	280	260	310
11	250	240	290	340	320	280	270	270	310	350	370	380	420	430	430	380	340	300	280	280	330	350	350	260	326
12	230	260	260	270	240	230	260	270	300	330	390	370	400	400	q410b	430	350	320	270	280	290	280	250	250	306
13	220	220	230	260	280	290	270	280	310	360	390	350	q350b	350	410	370	350	300	260	320	360	330	370	400	318
14	340	280	240	250	270	300	260	290	300	330	380	400	420	420	380	380	360	250	270	270	270	290	280	260	312
15	260	230	250	300	330	440	q420c	q390c	q370c	340	370	360	330	360	390	400	370	320	270	280	380	400	330	280	340
16	260	220	220	240	240	250	250	290	290	330	360	360	370	380	360	350	320	320	270	270	300	280	230	210	290
17	220	230	250	250	260	280	270	280	300	340	390	400	380	360	350	340	320	320	270	270	380	420	450	340	320
18	340	370	250	230	230	280	280	290	330	330	380	370	390	370	370	360	330	290	260	260	280	290	300	230	309
19	280	270	310	320	280	290	270	300	300	380	410	410	370	400	390	360	330	310	260	300	400	410	410	350	338
20	380	290	280	270	250	250	250	290	330	410	440	420	390	380	390	360	350	310	280	270	320	390	360	320	332
21	280	260	260	260	260	q260b	260	270	300	350	420	450	430	450	380	370	340	320	280	330	420	540	550	530	357
22	430	380	350	410	370	320	270	280	350	380	420	410	420	420	400	370	330	250	270	290	310	290	400	320	352
23	250	260	280	300	290	250	260	250	350	350	410	400	430	430	420	390	380	260	290	330	390	340	360	300	332
24	250	240	240	240	230	250	270	q300c	q330c	360	q370c	q390c	400	390	380	360	330	340	250	280	300	330	320	290	310
25	250	250	260	280	290	280	260	310	350	360	410	430	460	450	420	400	350	250	270	320	350	400	390	320	338
26	290	300	260	260	240	270	270	310	340	380	420	420	420	440	400	380	340	350	270	240	290	320	340	330	328
27	310	260	240	220	200	250	250	300	310	360	370	350	360	400	370	360	350	250	280	300	340	320	380	440	315
28	q380f	q320f	260	260	250	260	280	280	320	340	360	400	400	400	380	370	380	330	280	260	260	280	300	370	322
29	350	240	230	240	260	260	260	300	310	380	390	390	380	q360a	350	360	340	240	270	310	370	370	450	350	323
30	370	300	240	240	250	260	270	300	350	360	370	380	370	340	320	360	360	350	270	280	320	350	350	330	320
31	310	270	230	230	250	280	270	290	300	350	360	370	360	370	370	340	350	240	280	300	320	330	420	430	318
MEAN*	306	286	275	278	267	275	269	287	316	348	378	383	387	389	330	364	344	288	272	284	326	341	351	324	322

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 197

JANUARY 1942 | JANUARY 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.4	4.7	4.3	4.4	...c	...c	...c	...c	...c	...c	...	...
2	...	p4.3c	p4.6c	4.9	4.9	4.8	5.0	5.0	4.8	4.6	4.6	...	...
3	...	4.2	4.6	4.8	4.8	5.0	4.8	4.8	5.0	4.8	4.8	...	...
4	...	4.2	4.7	4.8	5.3	5.0	4.8	4.9	5.0	4.8	4.5	...	...
5	...	...	4.4	4.8	5.0	4.8	5.3	5.0	5.0	4.9	4.7	4.3	...
6	...	4.2	4.4	5.0	4.8	5.0	...c	...c	...c	...c	...c	...	...
7	...	p4.3c	p4.5c	4.8	4.9	4.8	4.9	5.0	4.8	4.7	...	...	...
8	...	4.4	5.1	4.7	4.9	4.8	4.8	4.9	5.0	4.9	4.7	...	...
9	...	4.3	4.8	4.9	5.0	4.8	5.0	5.1	4.7	p4.6c	4.5	...	...
10	...	4.4	5.0	4.8	4.8	4.9	4.8	4.9	4.9	4.8	4.6	4.3	...
11	...	4.3	4.7	4.8	4.9	4.8	5.0	5.0	4.9	4.8	4.5	4.3	...
12	...	4.0	4.5	4.6	4.7	4.7	4.8	4.8	p4.8b	4.8	4.4	4.2	...
13	...	4.2	4.5	4.8	5.0	4.7	p4.8b	4.7	4.7	p4.6c	p4.5c	4.3	...
14	...	4.3	4.4	4.5	4.8	4.7	4.9	4.8	4.6	4.6	4.4	...	...
15	...	p4.3c	p4.4c	4.6	4.9	5.0	4.7	4.7	4.8	4.9	4.6	4.6	...
16	...	4.3	4.5	4.9	4.8	4.7	4.9	4.9	4.8	4.7	4.5	4.3	...
17	...	4.3	4.6	4.7	4.9	4.9	4.8	4.7	4.8	4.8	4.4	4.5	...
18	...	4.3	4.5	4.8	4.9	4.9	5.0	4.7	4.9	4.8	4.5	4.3	...
19	...	4.4	4.5	4.7	4.8	4.8	4.8	4.8	4.8	4.7	4.7	4.4	...
20	...	4.2	4.5	4.8	4.8	4.7	4.7	4.7	4.7	4.8	4.5	4.3	...
21	...	4.2	4.5	4.6	4.7	4.7	4.6	4.6	4.7	4.6	4.6	4.3	...
22	...	4.3	4.5	4.9	4.8	4.7	4.7	4.7	4.7	4.5	4.4	...	...
23	...	...	4.8	4.5	4.8	4.7	4.7	4.8	5.0	4.5	4.6	...	...
24	...	...	...	...c	...c	...c	4.8	4.7	4.5	4.5	4.5	4.4	...
25	...	4.3	4.5	4.6	4.7	4.7	4.7	4.7	4.7	4.6	4.4	...	...
26	...	4.5	4.5	4.7	4.8	4.8	4.8	4.8	4.6	4.6	4.4	4.5	...
27	...	4.3	4.7	4.8	4.7	4.7	4.8	4.8	4.6	4.6	4.5	...	...
28	...	4.2	p4.5a	4.8	4.7	4.9	4.8	4.7	4.6	4.6	4.5	4.4	...
29	...	4.3	4.4	4.8	4.8	4.7	4.8	p4.8a	p4.9a	5.0	4.5	...	...
30	...	4.2	4.8	4.7	4.7	4.8	4.8	4.8	4.6	4.5	4.4	4.3	...
31	...	4.2	4.4	4.5	4.7	4.7	4.8	4.7	4.6	4.4	4.4	...	...
* MEAN	...	4.3	4.6	4.7	4.8	4.8	4.8	4.8	4.8	4.7	4.5	4.4	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	220	220	240	...c	...c	...c	...c	...c	...c	...	...
2	...	p240c	p230c	220	220	220	200	200	220	210	220	...	...
3	...	250	240	225	220	230	220	200	200	230	240	...	...
4	...	230	230	220	210	220	200	200	220	220	230	...	...
5	...	...	240	220	230	230	220	230	220	210	240	250	...
6	...	240	220	220	220	220	...c	...c	...c	...c	...c	...	...
7	...	p240	p230	230	220	220	200	210	230	220	...	...	...
8	...	240	230	230	220	210	210	200	200	250	200	...	...
9	...	240	230	240	230	230	220	210	200	p210c	220	...	...
10	...	240	230	220	220	200	210	210	220	230	240	240	...
11	...	230	240	230	230	220	200	200	190	200	250	250	...
12	...	230	220	230	220	210	210	200	p200b	210	200	250	...
13	...	240	240	230	210	220	p210b	p210b	200	p210c	p220c	240	...
14	...	240	230	220	220	230	210	210	210	200	200	...	...
15	...	p240c	p230c	220	220	220	220	210	210	210	210	230	...
16	...	240	p230a	220	210	210	220	200	210	220	230	250	...
17	...	240	230	220	220	210	220	220	200	210	200	250	...
18	...	230	220	220	210	220	220	200	210	200	200	230	...
19	...	230	220	210	210	200	210	210	210	200	200	250	...
20	...	240	220	210	210	210	220	210	200	200	190	240	...
21	...	240	220	210	220	210	200	200	190	200	220	250	...
22	...	240	220	220	210	210	210	210	210	200	190	...	...
23	...	...	220	230	220	210	210	210	200	210	200	...	...
24	...	p240c	p230c	230	p220c	p210c	200	210	200	190	200	220	...
25	...	250	220	230	220	220	200	190	200	200	190	...	...
26	...	240	210	220	220	210	210	210	220	200	200	240	...
27	...	230	210	220	210	190	200	190	210	190	200	...	...
28	...	230	240	230	200	210	210	210	200	210	200	250	...
29	...	230	200	210	210	210	230	p220a	p220a	230	210	...	...
30	...	250	240	220	220	220	220	220	220	190	200	250	...
31	...	240	220	220	220	220	210	210	210	210	210	...	...
* MEAN	...	238	226	22.	218	215	211	207	208	209	211	243	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 198

JANUARY 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1942

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	0.8	0.9	1.0	0.8	...c	...c	...c	...c	...c	...c	...c	...c
2	...c	...c	...c	1.4	1.7	1.8	1.8	1.8	1.7	1.2	1.0	0.8	0.8
3	0.6	0.8	1.0	1.2	1.6	1.7	1.7	1.7	1.2	1.2	1.0	0.8	0.6
4	0.6	0.9	1.1	1.2	1.7	1.7	1.7	1.7	1.1	1.1	1.0	0.6	0.6
5	0.6	0.8	1.0	1.1	1.0	1.7	1.7	1.8	1.7	1.7	1.7	1.1	1.0
6	0.6	0.9	1.1	1.3	1.7	1.8	...c	...c	...c	...c	...c	...c	...c
7	...c	...c	...c	1.4	1.7	1.9	1.9	2.0	1.9	1.9	1.1	0.8	0.6
8	0.6	0.6	1.1	1.4	1.7	1.9	1.7	1.9	1.7	1.3	1.7	1.0	0.6
9	0.8	0.9	1.1	1.8	1.7	1.7	1.8	1.7	1.7	p1.4c	1.0	0.8	0.6
10	0.6	1.0	1.2	1.2	1.4	1.9	1.9	1.8	1.9	2.0	1.8	1.1	0.9
11	0.8	0.8	1.1	1.3	1.3	1.9	1.9	1.8	1.8	1.0	1.4	1.0	1.1
12	0.8	1.2	1.4	1.3	1.8	1.8	1.8	1.9	p1.9b	1.9	1.4	1.0	0.9
13	0.8	0.8	1.1	1.2	1.2	1.8	p2.3b	p2.8b	2.0	p1.9c	p1.8c	1.7	0.8
14	0.6	0.8	1.1	1.4	1.7	1.9	1.8	1.9	1.8	1.7	1.2	1.1	0.8
15	p0.7c	p0.9c	p1.1c	1.2	1.7	1.9	1.8	2.0	2.7	1.9	1.1	0.7	0.6
16	0.8	1.4	1.9	2.0	1.9	1.8	1.8	1.8	2.1	1.9	1.4	1.1	0.8
17	0.6	0.7	1.0	1.1	1.3	1.7	1.7	2.1	1.8	1.1	1.0	0.7	0.7
18	0.8	0.9	1.0	1.3	1.8	1.9	1.9	1.8	1.8	1.8	1.1	1.0	0.8
19	0.6	0.6	0.9	1.2	1.7	1.4	1.9	1.9	1.8	1.7	1.2	1.0	0.8
20	0.7	0.8	1.0	1.7	2.0	1.8	1.8	1.8	1.4	1.3	1.2	1.0	0.7
21	0.7	0.9	1.0	1.1	1.4	1.1	1.3	1.4	1.7	1.7	1.0	1.1	1.0
22	0.8	1.0	1.0	1.2	1.4	1.8	1.7	1.8	1.7	1.2	1.2	0.9	0.8
23	0.8	0.8	1.0	1.2	1.7	1.4	1.4	1.7	1.2	1.0	0.9	0.7	0.7
24	0.7	0.8	1.1	1.6	p1.6c	p1.7c	1.8	1.8	1.8	1.6	1.6	0.8	0.7
25	0.6	0.8	1.0	1.1	1.7	1.7	1.7	1.7	1.7	1.2	1.1	0.9	0.7
26	0.7	0.8	1.0	1.2	1.7	1.7	1.7	1.7	1.7	1.1	1.2	0.8	0.7
27	0.6	0.9	1.1	1.2	1.7	1.7	1.7	1.7	1.7	2.2	1.0	0.7	0.6
28	0.6	0.9	1.1	1.8	1.8	1.7	1.8	1.7	1.7	1.7	1.0	0.7	0.6
29	0.8	0.6	1.0	1.2	2.1	1.8	2.0	p1.9a	p1.8a	1.7	1.1	1.0	0.9
30	0.6	1.8	1.8	1.9	1.9	2.0	2.8	2.3	2.0	1.8	1.2	1.0	0.8
31	0.6	0.9	1.2	1.8	1.7	1.8	1.8	1.8	1.8	1.2	1.0	1.0	1.0
MEAN*	0.7	0.9	1.1	1.3	1.6	1.8	1.8	1.8	1.8	1.5	1.2	0.9	0.8

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2.0	3.2	2.8	2.7	2.6	...c	...c	...c	...c	...c	...c	...c	...c
2	...c	...c	...c	2.8	3.5	3.8	3.8	3.9	3.5	3.5	2.9	2.5	1.8
3	1.9	2.4	3.0	3.4	3.7	3.9	3.9	3.9	3.6	3.7	3.0	2.6	1.9
4	1.9	2.7	3.1	3.5	3.6	4.1	4.0	3.8	3.7	3.5	3.0	2.4	1.8
5	1.9	2.6	3.0	3.1	3.3	3.5	3.9	3.8	3.7	3.4	3.2	2.7	1.8
6	1.8	2.7	2.9	3.3	3.8	4.0	...c	...c	...c	...c	...c	...c	...c
7	...c	...c	...c	3.4	3.6	3.7	4.1	4.0	4.3	3.5	3.0	2.5	1.7
8	1.9	2.6	3.0	3.4	3.6	4.0	4.2	4.1	3.7	3.4	3.1	3.0	1.8
9	2.1	2.8	3.2	3.6	3.6	4.3	4.1	4.0	3.9	p3.5c	3.1	2.8	2.1
10	1.9	2.7	3.0	3.5	3.6	3.9	3.9	3.8	3.7	3.3	3.2	2.1	1.8
11	1.9	2.6	3.2	3.4	3.5	3.8	3.8	3.7	3.5	3.5	3.2	2.7	1.9
12	2.0	2.7	3.2	3.4	3.4	3.6	3.6	3.8	p3.6b	3.5	3.2	3.6	1.6
13	1.8	2.2	3.1	3.3	3.7	3.8	p3.9b	p4.1b	3.5	p3.2c	p3.0c	2.7	1.7
14	1.9	2.7	2.9	3.4	3.8	3.5	3.7	4.0	3.9	3.6	3.0	2.8	2.0
15	p1.4c	p2.0c	p2.8c	3.4	3.6	3.6	2.6	3.9	3.9	3.5	3.1	2.8	1.8
16	1.8	2.7	3.1	3.5	3.7	4.0	4.0	3.4	4.0	3.5	2.8	2.6	1.7
17	1.9	2.7	2.8	3.2	3.6	3.7	3.8	4.1	3.6	3.2	3.0	3.2	1.6
18	2.0	2.6	3.0	3.4	3.6	3.8	4.2	3.8	3.6	3.8	3.0	2.5	1.7
19	1.7	2.5	2.8	3.3	3.7	4.0	3.8	4.0	3.7	3.3	2.8	2.6	1.7
20	1.7	2.6	3.0	3.4	3.8	3.8	3.8	3.7	3.9	3.5	3.0	2.5	1.9
21	1.8	2.5	3.0	3.2	3.5	3.8	4.0	4.1	3.8	3.5	3.0	2.6	1.8
22	1.4	2.5	2.6	3.4	3.7	3.9	4.0	3.7	3.6	3.2	3.0	2.5	1.8
23	1.7	2.6	2.9	3.2	3.6	3.7	3.7	3.9	3.5	3.2	2.9	2.7	1.0
24	1.3	2.5	3.2	3.1	p3.3c	p3.5c	3.7	3.5	3.4	3.2	2.9	1.8	1.7
25	1.8	2.6	3.0	3.1	3.4	3.5	3.6	3.6	3.5	3.2	3.0	2.5	1.5
26	1.6	2.5	3.0	3.2	3.5	3.8	3.8	3.7	3.6	3.1	3.2	2.8	1.8
27	1.7	2.5	3.1	2.8	3.3	3.5	4.1	3.6	3.7	3.3	3.0	2.6	1.8
28	1.7	2.6	3.3	3.4	3.5	3.7	3.7	3.8	3.4	3.3	3.0	2.5	1.8
29	1.8	2.4	3.0	3.0	3.6	3.7	4.1	p3.9a	p3.6a	3.4	3.0	2.8	1.8
30	1.8	2.8	3.2	3.4	3.6	3.6	3.8	3.6	3.4	3.5	3.0	2.6	1.9
31	1.8	2.4	3.0	3.4	3.6	3.7	3.6	3.5	3.7	3.4	3.0	2.7	1.6
MEAN*	1.8	2.6	3.0	3.3	3.5	3.8	3.8	3.8	3.7	3.4	3.0	2.6	1.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 199

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1942 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — FEBRUARY 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...f	...f	4.3	2.9	2.1	1.6	4.3	7.1	8.1	8.3	7.7	7.4	7.5	8.3	8.5	8.5	9.1	9.7	10.3	10.0	8.8	7.3	6.4	5.7	...
2	5.6	5.6	5.6	4.4	2.6	2.1	4.9	7.1	8.6	9.3	9.6	9.3	8.2	8.4	9.8	10.6	10.7	10.6	10.9	10.6	9.5	9.7	p8.4a	p7.1f	7.9
3	5.8	5.5	3.7	2.6	2.6	1.9	4.4	6.8	8.2	8.2	7.5	7.4	8.4	9.4	9.9	10.2	10.2	10.3	10.8	10.9	9.6	8.5	7.0	6.4	7.3
4	5.2	4.2	2.6	2.1	1.6	1.4	4.6	7.5	8.4	9.2	8.9	8.3	8.1	7.8	7.6	7.9	8.9	9.6	10.0	9.4	7.9	6.8	5.0	6.0	6.6
5	6.2	4.5	4.1	4.2	3.0	2.4	5.0	7.2	8.2	8.7	9.9	10.3	10.0	8.4	8.1	p8.5c	8.9	9.7	10.3	10.5	10.0	9.8	9.4	9.0	7.8
6	9.0	7.3	6.5	5.8	p5.6f	5.5	5.4	7.8	9.9	10.6	10.4	7.3	7.0	7.4	8.0	9.3	10.2	10.7	10.7	10.6	9.9	9.5	9.9	8.7	8.5
7	7.4	5.4	4.3	3.7	3.7	3.7	5.5	8.3	9.4	10.4	9.6	7.9	7.6	7.6	8.2	8.6	9.3	9.7	10.0	10.0	8.3	7.9	7.2	7.1	7.5
8	6.2	4.4	3.5	3.3	p3.8f	p4.1f	4.5	7.4	8.9	9.2	7.5	7.4	7.4	7.2	8.0	8.3	9.3	10.1	10.4	10.2	8.8	8.8	9.1	8.2	7.3
9	6.7	5.6	4.2	3.8	3.3	2.3	4.5	7.3	7.9	8.6	8.9	9.3	8.1	7.1	6.9	6.9	7.2	7.6	8.4	8.4	6.7	5.7	5.9	6.1	6.6
10	6.1	5.6	5.1	5.0	4.6	4.2	5.4	7.2	8.7	9.3	...c	...c	...c	...c	...c	...c	...c	8.1	8.3	8.3	8.2	7.6	7.5	8.3	...
11	7.6	5.4	4.5	4.0	3.8	p3.5f	4.5	6.6	7.1	8.3	9.1	9.7	9.8	8.4	p8.6c	p8.8c	9.0	9.5	9.5	9.3	9.0	8.0	8.2	7.5	7.5
12	7.1	6.5	5.5	5.0	4.4	3.5	4.9	7.1	7.7	8.3	9.0	10.0	10.5	10.5	p9.7c	p8.9c	p8.1c	8.1	8.1	7.8	7.0	6.6	6.6	7.8	7.4
13	8.4	7.6	5.3	3.4	3.0	2.8	4.6	6.7	7.7	8.2	8.8	9.7	10.2	10.0	9.2	9.0	...c	...c	...c	...c	...c	...c	...c	...c	...
14	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
15	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.0	9.9	10.0	9.6	...c	...c	...c	...c	...
16	...c	...c	...c	...c	...c	...c	...c	...c	8.7	p9.0c	p9.4c	p9.8c	10.1	10.6	11.3	11.7	11.5	11.5	11.1	11.3	11.3	9.2	9.7	9.6	...
17	9.4	6.5	4.7	4.0	3.8	3.3	4.8	7.3	8.8	9.5	8.0	6.9	6.7	7.2	8.2	9.2	10.3	10.5	10.2	9.8	9.5	8.3	8.3	8.3	7.6
18	8.3	6.5	p5.7f	5.7	p5.3f	p4.9f	4.5	7.2	8.6	9.1	7.5	6.9	6.7	7.2	7.5	8.2	9.2	9.8	9.7	9.6	8.9	8.3	p6.3f	6.0	7.4
19	5.7	4.8	3.6	3.1	2.6	2.4	4.6	6.6	7.1	8.1	8.6	8.7	6.9	7.2	p7.8c	p8.4c	8.9	9.5	9.8	8.1	●p7.4f	p6.7f	p6.0f	6.5	6.6
20	7.1	6.6	6.0	5.8	4.8	4.0	5.8	7.3	8.5	9.6	9.9	8.0	7.2	p7.4c	p7.7c	p7.9c	8.2	8.2	8.9	8.6	8.0	p8.2f	6.1	6.4	7.3
21	6.5	6.7	6.5	5.9	p5.3f	p4.8f	4.3	8.3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
22	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.8	11.0	11.6	11.1	10.7	10.6	9.4	10.0	10.4	9.5	8.7	8.6	...
24	8.4	6.0	4.4	4.0	4.4	4.2	5.6	8.8	9.4	10.1	10.7	10.5	9.8	9.2	9.5	9.3	9.6	9.2	8.7	8.0	7.0	6.5	6.8	7.1	7.8
25	7.3	6.4	5.1	4.6	4.4	3.8	5.4	8.0	9.4	10.4	10.3	9.4	8.8	8.7	8.6	8.4	8.6	8.9	8.5	7.7	6.5	6.9	7.5	8.0	7.6
26	8.4	6.7	5.4	5.1	5.1	4.8	5.6	8.3	9.9	11.0	11.5	11.6	10.7	9.5	9.0	8.8	9.1	9.3	8.9	7.9	7.3	7.5	8.2	8.2	8.2
27	8.3	7.2	6.6	6.2	5.6	5.6	6.7	9.4	10.4	10.6	10.8	11.9	11.8	11.4	9.5	9.4	9.6	9.5	9.5	8.4	7.7	7.7	7.8	8.3	8.7
28	7.8	7.0	6.9	5.6	5.2	5.0	6.1	p9.2f	p12.2f	12.2	p11.8b	p11.4b	11.0	12.0	p11.1c	p10.2c	p9.3c	8.4	8.4	8.5	8.4	7.9	7.3	7.3	8.8
29																									
30																									
31																									
MEAN*	7.2	6.0	5.0	4.4	3.9	3.6	5.0	7.6	8.8	9.4	9.3	9.0	8.8	8.8	8.9	9.0	9.4	9.6	9.6	9.3	8.5	8.0	7.5	7.5	7.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 200

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1942 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — FEBRUARY 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	370	270	230	240	280	220	270	290	370	370	380	400	400	370	390	390	350	310	260	280	300	340	380	370	326
2	320	280	270	230	240	320	250	260	290	320	390	400	380	380	360	350	340	300	260	270	310	370	390	370	319
3	320	230	220	230	240	270	270	300	320	360	400	400	390	380	370	350	350	320	250	270	280	290	310	280	308
4	230	230	240	260	270	270	250	270	300	350	390	410	410	420	420	410	360	290	250	280	300	400	340	270	318
5	210	240	240	250	300	280	270	260	270	300	350	390	420	430	380	q380c	370	250	270	260	300	290	260	260	302
6	270	290	300	310	270	220	250	260	280	350	350	400	430	450	390	360	340	320	270	250	310	290	220	210	308
7	230	260	320	350	330	310	270	270	320	360	360	380	410	400	400	380	350	330	280	300	310	300	290	250	323
8	220	220	270	290	300	250	240	270	280	360	400	400	430	450	390	380	370	300	270	280	300	280	240	210	308
9	230	220	240	240	240	240	260	260	290	330	390	400	400	440	490	400	320	330	280	300	380	370	340	270	319
10	230	240	240	250	270	250	270	270	310	330	...c	...c	...c	...c	...c	...c	...c	340	270	290	270	270	250	220	...
11	220	250	280	300	300	340	250	270	270	300	340	380	400	390	q380c	q370c	360	250	270	290	290	320	290	270	308
12	250	240	240	240	240	240	250	260	300	300	340	340	360	380	q380c	q370c	370	330	260	290	350	370	290	240	301
13	240	220	220	250	240	240	260	270	q290c	310	330	340	350	350	370	370	...c	...c	...c	...c	...c	...c	...c	...c	...
14	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
15	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
16	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	360	360	340	320	320	310	260	280	270	310	330	310	...
17	250	220	240	260	230	230	250	280	300	350	380	400	390	400	360	350	330	330	270	280	290	380	370	330	311
18	290	260	260	280	q270f	q260f	250	270	310	330	370	410	400	380	380	370	330	290	260	300	330	390	380	340	321
19	260	220	230	230	300	240	240	250	280	310	370	410	420	400	q380c	q350c	330	310	260	390	290	240	240	230	299
20	220	240	240	240	260	270	250	260	280	330	350	390	400	q380c	q360c	q350c	330	240	270	320	340	330	250	260	298
21	240	240	240	260	300	250	260	260	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
22	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	330	340	330	320	230	230	260	260	270	270	220	210	...
24	210	210	240	250	260	260	260	250	290	300	350	340	330	340	320	320	320	240	270	310	370	340	310	250	289
25	220	220	230	240	240	250	250	260	290	300	350	360	360	360	330	330	290	250	260	340	290	300	230	220	282
26	200	200	230	280	270	230	260	260	260	310	330	340	360	350	330	320	310	280	270	340	350	290	250	240	286
27	220	230	250	270	270	240	260	240	280	300	320	330	330	360	330	320	310	230	270	340	320	270	250	230	282
28	220	230	230	240	250	250	260	...f	...f	...c	...c	...c	360	350	q330c	q310c	q290c	270	270	290	300	300	270	260	...
29																									
30																									
31																									
MEAN*	247	237	248	260	268	258	257	265	294	327	362	381	384	385	370	355	330	289	266	297	310	318	291	265	303

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 201

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	3.9	4.4	4.7	4.6	4.8	4.8	4.7	4.8	4.5	4.7	4.3	...
2	...	4.1	4.6	4.5	4.8	4.8	4.8	4.7	4.6	4.7	4.5	4.1	...
3	...	4.2	4.8	4.9	4.9	4.8	4.8	4.8	4.7	4.6	4.5	4.4	...
4	...	4.2	4.6	4.8	4.9	5.0	4.8	4.8	4.8	4.7	4.5	4.2	...
5	...	4.0	4.2	4.9	4.7	4.9	5.0	5.0	4.7	p4.6c	4.6	...	...
6	...	4.3	4.8	5.1	5.0	4.9	4.9	5.0	4.8	4.9	4.9	4.2	...
7	...	4.2	4.6	4.8	4.7	4.9	4.9	4.9	4.9	5.0	4.6	4.3	...
8	...	4.1	4.7	4.9	4.9	4.8	4.8	4.8	4.7	4.6	4.7	4.2	...
9	...	4.3	4.8	4.9	4.9	4.8	4.8	4.7	4.9	4.6	4.4	4.3	...
10	...	4.1	4.5	4.7	...c	...c	...c	...c	...c	...c	...c	4.5	...
11	...	4.0	4.7	4.8	4.7	4.8	4.8	4.7	p4.8c	p4.9c	5.0	...	...
12	...	4.1	4.8	4.7	4.8	4.7	4.8	4.8	p4.7c	p4.5c	4.3	4.4	...
13	...	4.0	4.4	4.9	4.7	4.6	4.6	4.7	4.7	4.8	p4.5c	p4.3c	...
14	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
15	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
16	...	...c	...c	...c	...c	...c	4.8	4.8	4.7	4.9	4.9	4.4	...
17	...	4.1	4.4	4.6	4.6	4.7	4.7	4.9	4.6	4.9	4.6	...	...
18	...	4.2	4.5	4.5	4.6	4.7	4.6	4.6	4.6	4.7	4.5	4.1	...
19	...	4.0	4.5	4.6	4.7	4.7	4.7	4.6	p4.6c	p4.5c	4.5	4.2	...
20	...	4.2	4.7	4.8	4.8	4.8	4.7	p4.7c	p4.6c	p4.5c	4.4	...	...
21	...	4.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
22	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
23	...	...c	...c	...c	...c	...c	4.9	4.9	4.8	4.6	...	...	...
24	...	...	4.5	4.8	4.7	4.8	4.9	4.7	4.7	4.8	4.5	...	...
25	...	4.2	4.7	4.5	4.9	4.9	4.8	4.8	4.6	4.5	4.1	...	...
26	...	4.1	4.4	4.9	4.8	4.8	4.9	4.8	4.7	4.5	4.4	4.0	...
27	...	4.5	4.8	4.9	4.9	4.9	4.9	4.9	4.6	4.5	4.4	...	...
28	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
29													
30													
31													
* MEAN	...	4.1	4.6	4.8	4.8	4.8	4.8	4.8	4.7	4.7	4.6	4.3	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	220	210	200	190	190	200	200	210	200	230	...
2	...	220	220	220	220	210	200	200	190	200	230	240	...
3	...	250	220	210	200	200	200	200	200	190	190	230	...
4	...	230	230	220	220	210	200	200	200	200	190	250	...
5	...	230	230	220	210	230	200	210	200	p210c	220	...	...
6	...	230	220	230	220	210	210	220	210	210	230	230	...
7	...	230	210	200	220	210	190	190	200	220	220	200	...
8	...	220	220	200	200	200	190	190	190	200	210	230	...
9	...	240	220	220	210	210	200	200	190	200	210	230	...
10	...	230	220	220	...c	...c	...c	...c	...c	...c	...c	210	...
11	...	240	220	210	220	200	200	200	p200c	p200c	200	...	...
12	...	240	220	220	220	210	220	210	p210c	p220c	220	190	...
13	...	230	220	220	220	200	210	210	200	210	p220c	p230c	...
14	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
15	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
16	...	...c	...c	...c	...c	...c	190	190	200	190	190	220	...
17	...	230	210	200	200	200	190	190	190	190	230	...	...
18	...	230	210	200	200	190	190	190	190	190	200	230	...
19	...	230	220	210	210	200	200	190	p200c	p200c	200	240	...
20	...	230	220	210	210	200	200	p200	p200	p200	200	...	...
21	...	240	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
22	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...	...c	...c	...c	...c	...c	200	210	210	220	p220c	p230c	...
24	...	...	230	220	220	210	200	200	200	200	210	...	...
25	...	230	190	210	210	210	200	200	200	200	200	...	...
26	...	240	220	210	200	200	200	200	200	200	210	220	...
27	...	...	220	220	220	210	210	200	200	200	210	...	...
28	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
29													
30													
31													
* MEAN	...	232	219	213	211	205	200	200	199	203	210	226	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 202

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1942 FEBRUARY 1942

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	1.0	1.2	1.2	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.1	0.6	1.7	2.6	3.0	3.4	3.5	3.7	3.7	3.8	3.7	3.6	3.0	2.7	1.9
2	0.6	0.9	1.0	1.2	1.7	1.7	1.8	2.2	2.2	1.7	1.2	1.0	0.6	1.7	2.6	3.0	3.4	3.6	3.7	3.7	3.6	3.5	3.8	3.0	2.5	1.8
3	0.6	0.7	1.0	1.0	1.2	1.7	1.7	2.0	1.8	1.7	1.6	1.0	0.6	1.6	2.6	3.1	3.3	3.5	3.7	3.8	3.6	3.6	3.3	3.0	2.6	1.7
4	0.7	1.0	0.7	1.1	1.7	1.6	1.7	1.7	1.7	1.7	1.0	0.6	0.7	1.6	2.6	3.1	3.3	3.5	3.6	3.7	3.7	3.5	3.3	3.0	3.0	1.8
5	0.6	0.8	1.0	1.6	1.7	1.7	1.7	1.7	1.8	p1.8c	1.7	1.0	0.7	1.7	2.6	3.5	3.4	3.5	3.5	3.5	3.5	3.5	p3.4c	3.4	2.7	1.7
6	0.7	0.7	1.2	1.7	1.7	1.7	1.5	1.8	2.0	1.7	1.2	1.0	0.7	1.6	2.5	3.0	3.2	3.4	3.5	3.5	3.6	3.5	3.5	3.1	2.6	1.7
7	0.6	0.9	1.1	1.1	1.1	1.7	1.7	1.6	1.7	1.7	1.2	1.0	0.9	1.6	2.4	2.9	3.3	3.5	3.5	3.5	3.6	3.5	3.3	3.1	2.5	1.9
8	0.6	0.7	1.1	1.7	1.7	1.8	1.7	1.8	1.8	1.7	1.2	1.0	0.9	1.7	2.6	3.0	3.3	3.5	3.5	3.8	3.7	3.6	3.4	3.2	2.7	1.8
9	0.6	1.2	1.6	2.0	1.7	1.8	2.6	1.8	1.9	1.7	1.0	1.1	0.6	1.6	2.5	3.0	3.4	3.5	3.6	3.8	3.7	3.5	3.4	3.0	2.7	1.8
10	0.7	0.8	1.7	1.7	...c	...c	...c	...c	...c	...c	...c	0.7	0.6	1.6	2.6	2.9	3.4	...c	...c	...c	...c	...c	...c	...c	2.5	1.7
11	0.6	0.7	1.1	2.0	2.6	1.8	2.7	2.2	p2.0c	p1.8c	1.7	1.6	0.8	1.6	2.5	3.0	3.0	3.8	3.6	3.7	3.5	p3.4c	p3.2c	3.1	2.6	1.7
12	0.6	1.8	1.9	3.2	2.7	2.9	2.8	2.9	p2.5c	p2.2c	1.8	1.6	1.0	1.8	2.6	3.1	3.4	3.7	3.7	3.6	3.7	p3.5c	p3.2c	3.0	2.6	1.8
13	1.0	1.0	1.8	1.7	1.7	2.6	2.7	2.6	2.6	2.9	...c	...c	...c	1.6	2.6	2.9	3.0	3.4	3.5	3.9	3.7	3.7	3.6	...c	...c	...c
14	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
15	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
16	...c	...c	...c	...c	...c	...c	2.2	2.2	1.7	1.8	1.7	1.1	0.9	...c	...c	...c	...c	...c	...c	3.8	3.7	3.5	3.3	2.9	2.5	1.7
17	0.9	0.7	1.1	1.2	2.0	1.7	1.8	1.7	1.8	2.1	1.2	1.0	0.8	1.5	2.3	2.9	3.4	3.4	3.7	3.7	3.7	3.6	3.3	2.7	2.8	1.9
18	0.6	0.8	1.0	1.2	1.7	2.0	1.7	2.0	1.7	1.7	1.2	1.0	0.8	0.8	1.0	3.0	3.3	3.5	3.7	3.7	3.6	3.6	3.4	2.9	2.6	1.8
19	0.8	0.8	1.7	1.8	2.2	p2.2c	2.2	2.2	p1.9c	p1.6c	1.2	1.0	0.9	1.5	2.6	3.0	3.5	3.5	3.7	3.6	3.5	p3.3c	p3.2c	3.0	2.6	1.4
20	0.6	0.6	0.8	1.7	2.1	2.4	2.4	p2.4c	p2.3c	p2.2c	2.2	1.2	1.0	1.2	2.5	3.3	3.4	3.6	3.8	3.7	p3.6c	p3.4c	p3.2c	3.1	2.7	1.9
21	0.8	1.1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.7	2.5	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
22	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
23	...c	...c	...c	...c	...c	...c	...c	2.7	2.7	2.4	1.9	1.8	0.7	...c	...c	...c	...c	...c	...c	4.1	3.8	3.6	3.5	3.4	3.6	1.7
24	0.5	0.8	0.8	1.8	2.7	2.7	3.5	2.8	2.7	1.8	1.8	2.2	1.0	1.6	2.5	3.2	3.4	3.6	3.9	4.0	3.8	3.7	3.5	3.1	2.7	1.8
25	0.6	0.8	0.9	1.7	2.2	2.7	2.6	2.7	2.7	2.1	1.7	1.0	0.8	1.6	2.6	3.0	3.4	3.4	3.8	3.8	3.8	3.7	3.4	3.0	2.6	1.6
26	0.6	1.7	1.7	2.4	2.4	2.7	2.6	2.6	2.4	1.9	1.7	0.8	0.7	1.6	2.5	3.0	3.8	3.6	3.7	3.7	3.6	3.6	3.4	3.0	2.5	1.6
27	0.6	1.7	2.1	2.7	2.5	2.7	2.7	2.7	2.4	1.9	2.1	1.3	1.2	1.6	2.6	3.1	3.5	3.8	3.8	4.0	3.8	3.7	3.4	3.0	2.4	1.7
28	0.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.3	1.6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	3.5	1.5
29																										
30																										
31																										
MEAN*	0.7	1.0	1.3	1.7	2.0	2.1	2.2	2.2	2.1	1.9	1.5	1.2	0.8	1.6	2.5	3.0	3.4	3.5	3.7	3.7	3.7	3.6	3.4	3.0	2.7	1.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 203

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1942 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MARCH 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.8	11.4	11.3	10.9	8.4	9.8	9.5	8.7	6.8	p6.7f	p6.6f	6.4	...
2	6.8	6.4	6.9	p6.2c	p5.5c	p4.8f	4.2	8.3	9.9	10.7	9.6	10.5	8.6	9.2	8.7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
5	...c	...c	...c	...c	...c	3.9	4.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.4	8.5	p8.4c	p8.4c	...
6	p8.5c	8.5	p7.3c	p6.2c	p5.1c	p4.0c	4.5	8.1	10.5	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.7	8.9	p8.8f	p8.6f	8.4	7.9	...
7	8.0	6.2	5.5	4.7	4.3	4.2	5.4	8.0	9.7	10.5	8.5	8.3	8.3	8.2	8.3	8.8	8.9	9.0	9.3	9.0	8.8	8.2	7.8	p8.0f	7.7
8	8.2	7.2	4.3	4.5	4.7	p4.0f	4.2	7.7	9.2	10.3	11.0	9.9	8.4	8.2	8.7	9.1	8.9	8.2	8.0	7.7	7.0	p7.2f	p7.3f	p7.8f	7.6
9	7.3	7.4	7.6	7.3	p7.6f	p7.0f	8.1	8.2	10.2	10.5	11.0	11.3	9.2	9.0	8.8	9.4	9.5	9.5	9.1	8.0	8.0	9.5	9.9	8.5	8.8
10	7.8	7.3	6.3	6.6	5.8	3.1	4.3	7.2	9.0	10.5	10.6	9.5	8.9	8.5	9.5	9.4	9.5	8.9	8.5	8.4	8.4	8.9	8.7	9.7	8.1
11	9.4	8.3	7.0	7.0	6.7	6.2	6.9	8.8	10.3	10.6	10.6	10.2	9.6	9.0	8.5	8.6	8.9	8.4	8.4	8.0	7.2	p8.0f	p7.4f	8.2	8.4
12	8.8	8.2	6.7	6.3	3.8	2.7	4.2	7.3	8.4	8.3	7.8	p7.9c	p7.9c	p7.8c	7.8	7.9	8.3	8.5	8.5	8.2	7.5	7.5	8.1	8.6	7.4
13	8.6	8.3	6.8	4.9	3.5	2.6	4.3	7.8	9.0	9.4	p9.2c	p8.9c	p8.7c	p8.4c	8.2	8.2	8.5	8.6	8.7	8.9	8.0	8.0	8.7	8.7	7.7
14	8.4	8.4	7.2	4.6	3.5	p3.0f	3.7	6.9	8.1	8.5	8.6	...c	...c	...c	...c	...c	...c	...c	...c	7.6	7.4	7.5	7.9	8.0	...
15	9.2	7.5	6.1	4.8	4.2	3.7	3.8	7.0	8.4	8.3	8.2	8.3	8.4	8.4	8.5	8.5	8.5	8.4	8.4	7.9	7.5	7.9	9.2	8.2	7.5
16	8.4	6.5	p5.3c	4.1	2.6	2.4	4.2	7.3	9.2	9.6	8.4	8.5	p9.0c	p9.6c	p10.1c	p10.7c	11.2	11.3	10.5	9.5	9.2	9.4	8.0	7.9	8.0
17	7.6	5.1	2.5	p1.1b	p1.5b	p1.9b	4.0	7.5	8.9	8.3	7.2	7.1	7.4	8.1	8.5	9.3	9.5	9.4	9.4	8.7	7.9	7.9	8.2	9.3	6.9
18	8.4	5.8	4.2	2.6	1.4	p2.0b	4.1	7.7	9.5	8.3	7.4	7.3	7.7	8.3	9.1	9.5	9.8	9.7	9.0	8.8	9.2	10.5	10.4	9.8	7.5
19	8.4	6.0	4.6	3.6	3.1	2.7	4.7	8.3	10.0	10.9	10.7	9.1	8.7	9.9	10.5	11.0	11.0	10.3	9.7	9.8	9.4	9.5	11.4	11.4	8.5
20	11.3	7.9	5.5	4.4	3.3	2.9	4.8	8.4	10.0	10.6	9.3	8.8	9.3	9.7	9.8	10.0	10.3	10.7	10.5	8.6	10.5	10.9	10.9	10.3	8.7
21	9.2	8.6	6.4	4.4	3.6	3.2	5.1	8.6	9.9	10.8	9.6	8.9	8.9	8.8	9.5	10.2	10.3	10.2	10.1	8.8	p8.1f	p9.6f	9.6	9.4	8.4
22	9.6	7.5	6.3	6.0	6.1	5.9	6.5	9.6	11.5	12.5	11.9	10.2	10.1	10.3	10.3	10.8	11.0	11.2	11.0	10.3	9.4	9.5	10.2	10.8	9.5
23	9.2	7.0	6.5	5.0	3.9	3.9	5.4	8.6	10.8	11.2	9.8	9.2	9.4	9.6	10.1	10.6	10.3	9.6	9.2	8.6	9.3	8.8	p8.7f	8.9	8.5
24	8.4	6.8	5.5	4.9	4.7	4.3	5.8	9.0	11.6	12.0	p11.0c	9.9	10.1	10.3	10.4	11.2	11.5	11.3	11.0	9.6	9.8	11.2	11.4	11.9	9.3
25	9.6	p6.0f	2.8	1.9	1.5	1.4	4.5	8.3	10.3	11.0	10.7	9.7	9.7	10.0	p10.0c	p10.1c	10.2	10.2	9.5	8.5	7.8	7.8	7.7	7.9	7.8
26	6.9	6.5	4.8	4.3	3.1	p2.1b	3.7	8.1	10.5	11.0	11.6	11.7	11.2	10.4	10.5	10.4	10.4	10.2	10.4	9.4	8.4	8.7	8.3	8.7	8.4
27	7.5	7.9	6.8	6.0	5.3	p4.3c	p6.0c	p8.5c	11.0	11.4	11.3	10.2	10.0	10.2	10.5	10.5	10.3	10.3	9.9	8.3	p7.9f	7.5	7.4	7.4	8.6
28	6.9	6.1	5.0	3.8	2.8	2.8	4.9	8.6	10.5	11.4	11.5	11.0	10.8	11.5	11.7	12.1	12.3	11.8	10.4	7.5	7.5	7.8	8.1	8.1	8.5
29	7.7	7.5	7.5	6.7	5.6	5.4	6.0	8.6	10.1	9.9	9.3	9.7	9.6	9.6	9.5	9.7	10.1	10.1	9.6	9.5	9.4	9.3	9.0	8.6	8.7
30	7.9	7.6	7.2	6.1	4.8	4.3	4.0	5.4	8.5	10.7	11.3	11.2	10.8	10.7	11.2	11.8	12.2	12.2	12.0	11.7	10.3	8.6	8.7	10.3	9.1
31	9.6	7.7	7.3	4.7	3.6	2.5	4.6	8.3	10.1	9.5	9.2	9.0	9.4	9.9	10.7	10.8	10.5	10.4	10.4	9.5	7.4	8.0	7.0	9.0	8.3
MEAN*	8.4	7.2	5.9	4.9	4.1	3.6	4.9	8.0	9.8	10.3	9.8	9.4	9.3	9.4	9.6	10.0	10.0	9.9	9.6	8.8	8.4	8.6	8.7	8.9	8.2

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 204

MARCH 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1942

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...	...	...	...	...	...	...	...	...	...	...	...	380	340	340	350	350	270	280	330	400	480	380	300	...
2	260	280	270	300	300	290	270	240	270	320	330	330	350	340	340	q320c	q300c	q280c	260	320	320	330	240	240	296
3	240	250	240	230	240	240	270	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	270	350	300	280	270	270	...
5	240	230	250	270	290	300	270	250	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	300	350	320	320	300	310	...
6	310	280	300	280	260	240	270	240	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	270	340	330	320	260	220	...
7	220	230	250	250	280	250	270	270	280	300	340	350	340	350	340	320	290	240	260	310	310	330	370	390	298
8	240	210	250	310	340	350	260	260	270	290	310	340	350	340	340	320	280	250	270	310	310	280	280	320	295
9	300	330	290	280	300	280	250	260	270	300	320	320	330	330	340	280	200	240	270	290	260	220	220	210	279
10	220	220	230	240	230	250	260	260	280	300	320	330	350	340	340	310	300	240	260	290	280	230	220	220	272
11	230	250	240	250	270	290	260	260	280	300	320	330	340	360	350	330	300	240	250	300	320	300	290	270	289
12	250	230	240	230	240	240	250	270	300	330	340	q345c	q350c	q355c	360	340	290	240	260	290	300	380	210	220	286
13	220	220	220	230	230	240	260	280	280	320	q325c	q330c	q330c	q335c	340	350	300	240	260	250	320	250	220	250	275
14	290	270	200	230	270	340	260	270	300	330	320	...c	...c	...c	...c	...c	...c	...c	...c	320	350	330	270	240	...
15	210	210	240	240	260	320	260	270	280	300	340	340	330	330	330	300	300	230	260	350	430	240	280	220	286
16	200	230	230	230	230	250	250	260	290	310	340	350	...c	...c	...c	...c	...c	290	270	350	360	280	280	260	...
17	230	200	230	q235b	q240b	q245b	250	270	290	310	350	380	330	340	320	310	290	240	270	330	340	220	260	240	280
18	200	210	220	230	240	q250b	260	270	280	310	350	360	330	330	330	320	300	300	270	290	240	210	220	220	272
19	200	210	240	240	230	240	250	250	270	300	320	340	330	330	330	310	310	310	280	330	290	310	230	220	278
20	220	200	240	230	250	260	260	260	280	300	330	330	350	310	300	300	300	310	270	470	400	240	250	250	288
21	230	210	230	230	250	250	260	270	280	300	320	330	330	220	320	300	300	250	280	340	370	350	300	230	281
22	220	230	270	280	270	230	250	260	260	290	300	330	320	320	310	300	290	250	270	400	330	240	220	200	277
23	210	240	240	250	260	240	260	270	270	290	300	320	320	320	330	320	300	250	280	310	310	250	220	220	274
24	210	220	240	270	270	240	250	240	270	300	q310c	320	320	320	300	310	300	240	280	360	330	280	230	220	276
25	200	230	240	250	280	280	260	260	290	300	310	330	310	320	q310c	q300c	290	320	270	380	310	340	280	220	287
26	240	240	220	240	240	270	260	240	260	290	300	310	310	300	320	300	290	250	280	340	390	290	290	250	280
27	240	220	230	240	250	q255c	q260c	q265c	270	270	300	300	310	320	310	290	280	250	280	350	370	290	230	210	275
28	210	210	220	220	230	240	270	260	260	270	290	300	300	300	320	300	280	250	290	350	420	300	220	220	272
29	220	220	230	260	250	240	270	270	280	300	300	300	320	330	310	300	290	240	280	290	300	250	220	210	270
30	230	210	220	240	240	260	260	230	270	290	300	320	310	310	280	270	300	240	280	340	290	230	210	220	265
31	220	220	220	220	230	240	260	280	280	290	320	310	330	310	310	290	320	250	280	360	390	270	290	280	282
* MEAN	232	232	239	248	258	263	260	260	277	300	319	330	331	324	325	310	294	258	273	333	333	288	259	245	283

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 205

LARCH 1942 MARCH 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	4.6	...c	...c	...c	...c	...c	...c	...c	...c	...	...
3	...	...c	...c	...c	.. c	...c	...c	...c	...c	...c	...c	...	...
4	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
5	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
6	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
7	...	4.0	4.7	4.8	4.7	p4.7c	4.7	4.7	4.7	4.8	4.2	...	...
8	...	4.0	4.6	4.8	4.6	4.7	4.7	4.6	4.5	4.5	4.1	...	...
9	...	4.1	4.3	4.6	4.6	4.8	4.7	4.8	4.6	4.2	...	...	...
10	...	4.1	4.5	4.6	4.6	4.5	4.7	4.6	4.5	4.6	4.3	...	...
11	...	4.0	4.3	4.3	4.7	4.6	4.7	4.8	4.5	4.5	4.4	...	...
12	...	4.0	4.5	4.7	4.6	p4.6c	p4.7c	p4.6c	4.6	4.6	4.3	...	...
13	...	4.3	4.3	4.5	p4.6c	p4.6c	p4.7c	p4.7c	4.8	4.7	4.3	...	...
14	...	4.2	4.5	4.6	4.6	...c	...c	...c	...c	...c	...c	...	...
15	...	4.3	4.2	4.6	4.6	4.7	4.6	4.6	4.6	4.5	4.2	...	...
16	...	4.2	4.5	4.5	...c	...c	...c	...c	...c	...c	...c	...	...
17	...	4.4	4.5	4.7	4.8	5.0	4.8	4.8	4.7	4.8	4.5	...	...
18	...	4.3	4.6	4.7	4.8	4.8	4.8	4.7	4.7	4.6	4.5	4.4	...
19	...	...	4.6	4.8	4.8	5.0	4.9	4.9	4.8	4.7	4.7	4.4	...
20	...	4.4	4.6	4.8	5.0	4.9	5.0	4.9	4.7	4.6	4.5	4.5	...
21	...	4.3	4.6	4.8	4.9	5.0	5.0	4.9	4.8	4.6	4.5	...	...
22	...	4.3	4.7	4.7	4.9	5.2	5.0	4.9	4.8	4.7	4.5	...	...
23	...	4.5	4.6	4.7	4.8	5.0	5.0	5.0	4.9	4.8	4.5	...	...
24	...	...	4.7	5.0	p5.0c	5.0	5.2	5.1	4.8	5.1	4.7	...	...
25	...	4.2	4.7	4.8	5.0	5.2	5.1	5.0	p4.8c	p4.7c	4.6	4.4	...
26	...	...	4.7	4.7	5.3	5.2	5.0	4.8	4.8	4.6	4.5	...	...
27	...	...	4.6	4.8	4.9	5.1	5.1	5.3	5.0	4.5	4.6	...	...
28	...	4.4	4.7	4.7	4.9	5.1	5.0	5.0	5.2	4.6	4.5	...	...
29	...	4.3	4.6	4.8	5.0	5.0	5.0	5.0	4.8	4.7	4.6	...	...
30	...	4.7	4.7	4.8	4.9	4.9	4.9	4.7	4.5	4.6	...	...	...
31	...	...	4.7	4.7	4.8	4.9	4.9	4.8	4.8	4.5	4.5	...	...
MEAN*	...	4.2	4.6	4.7	4.8	4.9	4.9	4.8	4.7	4.6	4.4	4.4	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	230	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
3	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
4	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
5	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
6	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
7	...	250	230	220	220	210	220	200	210	200	200	...	...
8	...	240	220	210	210	210	210	200	200	200	200	...	...
9	...	240	220	220	220	220	210	210	200	200	...	...	...
10	...	240	220	220	210	210	200	200	210	200	190	...	...
11	...	240	220	220	200	210	200	200	200	200	210	...	...
12	...	230	220	220	210	p200c	p200c	p210c	210	210	190	...	...
13	...	240	230	220	p210c	p210c	p200c	p210c	210	210	210	...	...
14	...	240	220	210	210	...c	...c	...c	...c	...c	...c	...	...
15	...	230	200	210	220	210	200	200	210	220	200	...	...
16	...	230	220	210	...c	...c	...c	...c	...c	...c	...c	...	...
17	...	230	220	210	200	200	200	200	200	220	220	...	...
18	...	230	220	210	200	200	190	190	200	210	220	240	...
19	...	...	220	220	200	200	200	190	210	220	210	240	...
20	...	240	230	220	220	210	200	200	200	200	210	250	...
21	...	240	230	220	210	210	200	210	200	200	220	...	...
22	...	230	230	220	210	200	200	200	200	200	210	...	...
23	...	240	220	220	210	210	200	190	210	200	220	...	...
24	...	...	230	210	p210c	210	200	200	210	210	220	...	...
25	...	240	230	220	210	210	190	180	p210c	p210c	210	250	...
26	...	...	240	230	210	200	200	210	200	210	220	...	...
27	...	...	220	200	190	190	190	200	200	200	190	...	...
28	...	230	220	220	210	210	200	200	220	210	200	...	...
29	...	240	220	210	210	210	200	200	200	200	210	...	...
30	...	...	240	220	210	200	200	200	p200a	200	210	...	...
31	...	p240a	p230a	220	210	200	190	200	190	210	190	...	...
MEAN*	...	237	224	216	209	206	200	200	204	206	207	245	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 206

MARCH 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1942

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	...	...	...	...	...	...	2.7	2.7	...c
2	1.0	2.7	2.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	2.0
5	1.0	2.2	2.7	...c	...c	...c	...c	...c	...c	...c	...c	1.1	1.8
6	1.1	1.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.2
7	1.0	2.0	2.3	2.4	2.5	2.4	2.6	2.5	2.3	2.1	2.2	1.4	1.8
8	1.0	2.0	1.8	2.2	2.2	2.2	2.0	2.2	2.3	1.8	2.0	1.4	1.2
9	0.8	1.1	1.7	2.2	2.3	2.1	2.1	2.4	2.4	2.2	2.1	1.6	1.2
10	1.8	2.1	2.2	2.3	2.0	2.3	2.4	2.4	2.0	1.9	1.8	1.4	1.0
11	0.8	1.7	1.7	1.8	1.9	2.2	2.3	2.3	2.0	1.8	1.8	1.4	1.0
12	1.0	1.8	2.1	2.3	2.4	p2.5c	p2.6c	p2.5c	2.4	2.4	2.2	1.7	1.1
13	1.2	1.8	1.8	2.3	p2.4c	p2.5c	p2.6c	p2.8c	2.8	2.4	2.2	1.7	1.6
14	0.9	1.7	1.8	2.0	2.3	...c	...c	...c	...c	...c	...c	...c	...c
15	1.0	1.8	2.1	2.0	2.2	1.7	2.4	2.2	2.1	2.3	1.8	1.7	1.7
16	0.8	1.8	2.2	2.1	...c	...c	...c	...c	...c	...c	...c	...c	1.9
17	1.0	1.4	1.3	1.8	1.9	1.9	2.0	2.0	2.2	2.1	1.4	1.2	1.0
18	1.1	1.9	1.4	1.8	2.0	2.3	2.0	2.3	2.2	1.8	1.4	1.1	0.8
19	1.1	2.0	1.8	2.2	2.2	2.4	2.1	2.2	2.2	1.8	1.7	1.4	1.0
20	1.0	1.4	1.7	2.2	2.3	2.1	2.1	2.8	2.1	1.9	1.4	1.3	1.0
21	1.0	1.1	1.4	2.1	2.0	2.0	2.1	2.3	2.0	1.8	2.0	1.4	1.1
22	0.9	2.0	2.2	2.2	2.2	2.2	2.4	2.1	2.2	2.2	2.0	1.4	0.9
23	1.2	2.0	2.1	2.2	2.2	2.2	2.2	2.3	2.8	2.3	1.4	1.4	1.0
24	0.9	2.0	2.2	2.2	p2.4c	2.6	2.4	2.4	2.2	2.3	2.1	1.4	1.0
25	0.8	2.1	2.3	2.2	2.4	2.4	2.3	2.4	p2.2c	p2.0c	1.9	1.4	1.1
26	1.2	2.2	0.9	1.8	2.2	2.1	2.1	1.8	2.3	2.2	1.4	1.4	0.8
27	p1.1c	p1.6c	2.1	1.7	1.7	2.4	1.7	1.7	2.3	1.7	1.4	1.0	0.8
28	0.9	1.4	2.1	2.1	2.4	2.4	2.3	2.1	2.3	1.8	1.8	1.3	1.0
29	0.8	1.2	2.1	2.3	2.4	2.4	2.3	2.3	2.3	2.2	1.4	1.4	1.0
30	0.8	2.0	2.4	2.3	2.3	2.4	2.0	2.4	2.4	1.9	1.4	1.4	1.0
31	1.1	1.7	2.8	2.1	2.3	2.2	2.2	2.2	1.7	1.4	1.4	1.1	0.9
* MEAN	1.0	1.8	2.0	2.1	2.2	2.3	2.2	2.3	2.2	2.0	1.8	1.4	1.2

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	...	...	...	...	...	...	3.5	2.7	2.0
2	1.8	3.0	3.5	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
3	p2.7c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	2.0
5	1.6	2.7	3.6	...c	...c	...c	...c	...c	...c	...c	...c	...c	p3.5c
6	2.2	2.7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.8
7	1.8	2.6	2.9	3.5	3.6	3.8	3.8	3.9	3.7	3.4	2.9	2.6	1.8
8	1.6	2.4	2.9	3.5	3.6	3.7	3.6	3.7	3.6	3.4	3.9	2.6	1.6
9	2.1	2.4	2.9	3.4	3.5	3.5	3.8	3.7	3.6	3.4	2.8	2.5	1.6
10	1.8	2.4	2.8	3.4	3.6	3.7	3.7	3.5	3.5	3.4	2.8	2.6	1.7
11	2.0	2.4	3.1	3.4	3.4	3.6	3.6	3.7	3.6	3.4	2.9	2.6	1.8
12	1.6	2.4	2.9	3.5	3.6	p3.7c	p3.7c	p3.6c	3.5	3.8	2.8	2.4	1.4
13	1.4	2.4	2.9	3.7	p3.8c	p3.8c	p3.9c	p3.9c	3.8	3.9	2.9	2.4	1.6
14	1.6	2.3	2.8	3.4	3.7	...c	...c	...c	...c	...c	...c	...c	...c
15	1.6	2.4	3.0	3.7	4.0	4.0	4.1	4.1	4.0	3.8	3.0	2.4	1.7
16	1.6	2.4	3.0	3.6	5.7	...c	...c	...c	...c	...c	...c	4.4	1.9
17	1.6	2.4	3.0	3.7	4.0	4.1	4.1	4.1	3.9	3.7	3.0	2.4	1.5
18	1.6	2.4	2.9	3.8	3.7	4.0	4.1	4.0	3.8	3.7	2.9	2.4	1.4
19	1.8	2.6	3.2	3.8	4.1	4.0	4.1	4.1	4.0	3.8	3.0	2.4	1.4
20	1.5	2.5	3.0	3.5	3.9	4.1	4.1	4.3	4.0	3.7	3.1	2.5	1.6
21	1.6	2.4	3.0	3.7	4.0	4.1	4.2	4.1	4.0	3.5	3.1	2.4	1.5
22	1.8	2.6	3.2	3.7	4.0	4.1	4.1	4.2	4.0	3.6	3.0	2.5	1.6
23	1.6	2.5	3.1	3.7	4.0	4.1	4.2	4.0	4.2	3.8	3.0	2.6	1.6
24	1.7	2.6	3.2	3.8	p4.0c	4.3	4.2	4.1	4.1	3.9	3.0	2.6	1.7
25	1.9	2.5	3.1	3.7	3.9	4.2	4.2	4.3	p4.0c	p3.4c	3.0	2.5	1.8
26	1.8	2.6	2.0	3.5	3.7	3.7	3.6	3.6	3.8	2.8	3.0	2.4	1.5
27	p1.7c	p2.6c	3.1	3.5	3.7	3.6	3.6	3.9	4.0	3.5	2.9	2.4	1.8
28	1.6	2.6	3.1	3.6	3.9	4.1	4.2	4.0	3.9	3.6	3.0	3.4	1.6
29	1.8	2.4	3.1	3.7	4.0	4.1	4.0	4.1	4.0	3.7	3.9	2.5	1.4
30	1.7	2.6	3.1	3.6	3.7	3.7	4.1	4.1	4.1	3.6	2.9	2.4	1.6
31	1.6	p4.0c	p4.0	3.8	3.7	3.9	4.0	3.9	3.3	3.3	2.8	2.4	1.3
* MEAN	1.8	2.6	3.0	3.6	3.9	3.9	4.0	4.0	3.8	3.6	3.0	2.6	1.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 207

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1942 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — APRIL 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	10.2	9.5	6.5	5.5	4.2	4.5	5.8	8.3	9.9	10.0	9.7	9.4	9.5	10.6	11.8	p12.2	p12.3	p12.2	11.7	10.4	10.1	10.0	p9.9f	9.8	9.3
2	11.0	9.8	5.8	4.4	2.8	2.3	4.6	8.1	10.1	11.2	11.3	11.0	10.1	9.8	10.3	10.5	11.2	10.4	10.0	9.4	8.9	8.2	8.3	8.6	8.7
3	9.8	9.7	8.1	7.4	6.1	p4.0f	4.4	8.5	10.8	11.3	10.1	10.1	10.2	10.8	11.3	11.7	11.1	10.7	10.7	11.5	11.8	11.2	10.0	9.6	9.6
4	10.4	10.1	5.8	3.2	3.3	3.3	4.1	7.2	p9.5c	11.8	11.5	7.9	7.9	8.3	9.3	10.5	10.2	10.0	10.2	9.2	9.1	9.7	10.6	11.0	8.5
5	10.3	9.3	7.7	6.3	5.5	5.3	5.4	8.1	9.3	10.8	10.7	9.3	8.5	8.6	9.3	9.3	9.2	9.6	10.0	9.3	9.0	9.2	10.0	11.0	8.8
6	10.2	8.3	5.6	4.5	3.6	3.0	4.5	7.5	9.1	9.7	10.2	10.0	9.4	9.5	9.2	8.6	8.4	8.4	8.9	8.6	8.2	8.7	8.1	7.8	7.9
7	7.6	7.3	5.4	4.8	4.6	4.2	4.9	7.8	9.3	10.1	9.5	8.8	7.9	8.3	p8.3c	8.3	7.8	7.9	7.4	7.4	7.8	8.4	8.6	8.3	7.5
8	8.1	8.8	7.1	7.1	3.6	3.8	5.2	7.8	8.9	p8.7c	8.5	p9.0c	9.4	10.0	p10.3c	10.6	11.3	10.4	9.6	8.5	8.0	7.7	8.8	9.8	8.4
9	9.8	9.0	7.6	6.6	6.3	5.9	6.2	8.0	8.5	8.7	p8.5c	p8.8c	8.7	9.0	8.6	10.0	p9.6c	9.3	8.4	8.2	7.7	7.7	7.5	8.4	8.2
10	7.7	8.3	7.3	5.4	4.2	3.2	4.4	7.4	8.7	9.4	8.8	p8.8c	8.8	9.2	p9.6c	p10.0c	10.3	9.4	8.3	6.8	p7.7f	p8.6f	p9.5f	p10.4f	8.0
11	p9.2	p8.9	8.6	6.7	3.6	3.0	4.1	7.7	8.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.6	7.7	7.9	7.8	...
12	8.1	8.7	8.5	7.9	7.0	6.3	6.0	8.0	8.7	9.1	9.0	9.2	9.5	9.9	10.2	10.3	10.2	9.5	8.5	7.6	7.4	7.4	7.4	8.2	8.4
13	8.2	7.0	6.4	5.7	8.8	3.8	4.5	7.1	8.0	7.9	8.2	8.7	9.9	11.6	12.0	11.9	11.1	10.3	8.2	7.6	6.5	8.3	p8.2f	8.0	8.2
14	6.6	5.4	5.4	4.8	4.6	3.8	5.1	8.5	10.0	10.4	10.2	8.8	8.5	8.8	9.0	8.9	9.8	9.5	8.9	7.8	6.9	8.3	8.1	8.2	7.8
15	7.8	7.4	6.3	5.3	4.4	3.8	5.0	8.3	9.7	10.3	9.3	9.1	9.0	9.3	9.7	10.3	10.4	10.7	10.7	10.1	9.8	9.9	10.3	8.8	8.6
16	7.8	7.0	5.6	5.0	p4.4f	p4.3f	4.2	8.2	9.4	9.3	9.3	9.5	9.9	9.7	9.8	10.6	10.6	10.4	10.1	8.7	p8.7f	p8.6f	p8.5f	8.5	8.3
17	7.4	7.3	5.7	4.6	5.3	5.0	p5.4f	5.4	8.4	10.3	11.8	11.0	9.6	10.4	11.8	p12.0	p12.1	11.0	11.8	11.3	10.3	10.1	9.6	9.6	9.0
18	9.6	9.1	6.0	5.2	5.1	5.1	5.5	8.4	10.7	11.7	11.3	11.1	11.5	11.3	10.9	10.4	10.2	10.3	10.3	9.0	p8.8f	9.2	8.8	8.4	9.1
19	8.8	8.5	6.9	5.7	5.3	4.3	5.1	8.6	11.0	p12.2	10.4	p9.9	9.5	9.5	9.4	10.2	11.2	11.4	11.0	p10.6	10.0	p9.4f	9.9	11.5	9.2
20	10.5	8.4	6.0	5.0	4.2	3.4	5.0	8.5	10.3	11.3	p10.9	p9.8	9.3	9.5	9.9	10.2	10.9	10.8	10.7	10.5	11.4	p11.6	11.2	9.0	9.1
21	8.3	7.7	6.4	5.2	4.4	3.4	4.8	8.5	10.4	11.0	10.3	9.4	9.7	10.0	9.8	10.0	9.9	10.1	9.6	8.5	7.8	9.1	9.0	p8.5c	8.4
22	7.9	7.3	5.8	4.4	2.8	1.9	4.4	8.0	p9.5	10.8	11.2	10.1	10.3	10.1	10.2	10.2	9.9	9.1	7.9	6.3	6.7	7.3	p6.9f	7.0	7.8
23	p5.8c	4.6	4.7	2.6	2.8	2.7	5.0	8.4	10.2	11.3	11.5	p11.4c	p10.8c	10.2	9.9	10.1	10.3	10.4	10.0	9.2	9.1	8.3	9.2	9.2	8.2
24	8.7	7.3	7.1	5.3	4.4	3.9	5.3	8.6	10.4	11.4	11.3	10.5	9.6	9.6	9.5	9.8	9.8	10.1	9.6	9.1	9.1	9.5	9.2	8.4	8.6
25	8.0	7.2	5.8	4.8	3.7	3.1	4.7	8.3	10.2	10.5	9.7	9.3	p9.3c	9.2	9.8	10.2	9.9	9.8	p9.4	8.0	8.3	8.7	8.8	7.7	8.1
26	7.0	6.6	5.8	5.1	4.9	4.3	5.5	8.3	9.9	10.3	9.7	9.4	9.3	9.6	10.2	10.1	10.0	9.6	9.0	7.8	8.1	8.9	9.0	7.8	8.2
27	7.5	6.4	4.9	3.6	3.3	3.1	3.7	7.2	9.0	9.4	p9.5	9.5	9.4	8.9	9.2	9.8	10.4	10.3	9.6	p9.3f	p9.0f	p8.7f	8.3	6.4	7.8
28	6.0	5.0	4.3	3.8	3.6	2.7	4.2	7.8	9.6	10.6	10.7	p10.3	9.4	9.1	9.4	9.9	9.9	9.7	8.7	8.3	8.6	8.6	7.9	7.0	7.7
29	6.7	6.6	5.8	4.4	3.8	3.3	4.6	7.7	9.9	11.1	10.7	9.4	9.0	9.2	9.3	p9.8	9.8	10.0	9.3	8.4	8.4	9.0	8.0	7.1	8.0
30	5.9	5.3	4.6	3.7	3.0	2.4	4.2	7.2	9.2	9.7	8.9	8.8	8.9	8.7	9.6	9.6	10.1	10.4	9.2	8.4	8.3	8.9	9.3	8.4	7.6
31																									
MEAN*	8.4	7.7	6.2	5.1	4.4	3.8	4.9	7.9	9.6	10.4	10.1	9.6	9.4	9.6	9.9	10.2	10.3	10.0	9.6	8.8	8.6	8.9	8.9	8.7	8.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 208

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1942 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — APRIL 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	230	230	280	280	280	270	270	280	300	300	330	330	310	300	290	290	250	270	320	350	340	240	230	283
2	220	220	220	240	230	270	260	270	270	280	290	320	320	310	300	270	300	260	280	330	310	280	250	240	272
3	240	230	260	320	370	380	270	260	280	280	300	300	310	280	310	280	280	240	260	250	240	230	230	230	276
4	220	190	200	250	310	230	250	240	270	280	300	320	300	310	300	310	300	260	230	230	260	240	230	240	261
5	260	270	250	280	300	220	230	240	270	290	300	320	320	320	320	290	290	240	270	310	290	230	220	210	272
6	200	210	230	230	240	190	260	250	270	300	320	320	340	330	320	320	300	230	280	320	280	270	250	220	270
7	220	210	230	230	250	240	260	260	310	300	320	340	370	360	q340c	320	310	240	260	330	290	230	240	260	280
8	220	200	220	230	230	260	260	260	290	q300c	310	q310c	320	320	q300c	280	290	250	270	310	290	250	230	220	268
9	230	220	230	240	260	250	250	240	290	300	q310c	q330c	350	330	320	300	q280c	260	260	270	250	250	230	220	270
10	220	220	220	230	230	230	240	260	290	320	340	q340c	q340	q400	q370c	q340c	310	240	280	390	330	320	250	240	290
11	240	250	270	230	230	290	270	250	280	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	350	270	250	230	...
12	220	220	230	240	250	240	250	270	300	300	320	330	310	320	330	300	300	240	270	280	250	280	270	220	272
13	210	210	230	240	240	240	290	240	300	310	310	320	310	310	300	260	220	260	280	340	330	370	330	220	278
14	220	220	240	240	250	260	250	250	280	320	320	330	350	330	300	300	290	240	290	370	250	310	230	220	278
15	210	220	210	220	220	240	260	270	270	390	300	q340	330	350	330	280	240	250	280	320	310	280	250	220	275
16	220	240	220	230	260	260	270	240	280	300	320	320	320	320	330	300	260	260	290	350	360	290	280	260	282
17	240	240	250	280	310	300	q270f	240	260	280	310	310	320	310	290	270	260	260	290	320	290	240	230	220	275
18	220	220	220	250	270	270	250	240	240	290	290	300	310	310	300	280	270	250	290	320	310	230	230	220	266
19	220	220	220	240	230	220	260	250	270	280	300	q300	300	290	280	q280	270	250	290	330	330	250	230	220	264
20	210	220	230	240	240	230	260	240	260	280	q290	280	300	310	290	280	260	250	280	300	260	220	210	220	257
21	220	220	220	240	230	230	260	260	260	280	390	290	310	320	q290	300	280	250	290	340	320	240	200	230	270
22	220	210	220	220	230	250	250	250	q240	280	290	300	340	310	300	390	280	250	320	300	340	350	270	210	276
23	210	250	240	260	280	240	250	260	260	270	250	q300	q320	310	290	270	270	250	300	310	310	240	230	230	267
24	220	220	230	240	240	240	270	240	260	270	290	320	330	310	290	280	280	250	290	330	q320	250	230	230	268
25	230	220	210	220	220	220	250	250	260	290	300	310	q320c	320	300	310	290	260	q290	350	290	230	220	220	266
26	230	220	230	230	240	240	250	260	270	290	290	300	330	q320	320	280	270	250	290	360	290	230	200	220	267
27	210	210	220	230	230	290	270	260	280	290	300	300	310	300	300	270	280	260	330	400	460	400	300	220	288
28	230	220	230	260	250	260	270	q240	270	q280	q290c	q290	300	320	310	280	280	260	290	290	240	220	220	230	264
29	220	210	220	220	230	240	270	260	260	280	300	290	330	310	310	290	270	250	290	320	260	230	210	210	262
30	210	220	220	240	230	240	260	270	270	q280	290	320	310	310	290	280	280	250	310	300	290	230	210	220	264
31																									
MEAN*	222	222	228	243	253	252	259	253	273	293	305	313	322	319	308	293	279	250	283	320	302	267	239	226	272

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 209

APRIL 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1942

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.4	4.6	4.7	4.7	4.9	p4.9	4.9	4.7	4.5	4.5	...	...
2	...	4.4	4.6	4.6	4.7	4.8	5.0	4.7	4.7	4.6	4.6	...	...
3	...	4.2	4.5	4.8	4.7	4.7	4.8	4.7	4.7	4.5	4.5	...	...
4	...	...	4.5	4.7	4.6	4.7	4.5	4.6	4.6	4.5	4.5	...	...
5	...	...	4.3	4.6	4.5	4.6	4.6	4.6	4.5	4.5	4.3	...	...
6	...	4.4	4.5	4.5	4.6	4.6	4.7	4.6	4.5	4.6	4.3	...	...
7	...	4.3	4.6	4.7	4.6	4.6	4.7	4.7	p4.7c	4.7	4.5	...	...
8	...	4.4	4.5	p4.6c	4.6	p4.7c	4.8	4.6	p4.5c	4.4	4.3	...	...
9	...	...	4.5	4.5	p4.6c	p4.7c	4.8	4.6	4.6	4.4	...	...	...
10	...	4.4	4.4	4.5	4.5	...c	...c	...c	...c	...c	...c	...	...
11	...	...	4.6	...c	...c	...c	...c	...c	...c	...c	...c	...	...
12	...	4.3	4.7	4.8	4.8	5.1	4.8	4.8	4.8	4.6	4.4	...	...
13	...	...	4.6	4.8	5.0	4.9	4.8	4.8	4.5	p4.4c	p4.3c	...	...
14	...	...	4.6	5.1	5.1	5.0	5.0	4.8	4.6	4.5	4.3	...	...
15	...	4.2	4.5	4.9	4.5	p4.9	5.0	5.0	4.9	4.6	...	...	...
16	...	...	4.5	4.8	4.9	4.9	5.0	4.9	4.9	4.6	4.5	...	...
17	...	...	4.3	4.8	5.2	5.0	5.1	4.9	4.7	4.3	...	...	...
18	...	...	4.1	4.7	4.8	5.0	5.1	5.0	4.7	4.7	4.5	...	...
19	...	4.2	4.6	4.8	5.1	4.9	4.9	4.8	4.7	p4.7	4.6	...	...
20	...	...	4.3	4.6	p4.8	4.9	5.0	5.1	4.9	4.5	4.2	...	...
21	...	4.1	4.6	4.9	5.1	5.1	5.1	5.0	p4.8	4.9	4.7	...	...
22	...	4.1	p4.3	4.8	4.8	4.8	5.1	5.0	4.8	4.6	4.4	...	...
23	...	4.3	4.6	4.5	4.5	p5.0	5.1	5.0	4.7	4.4	4.4	...	...
24	...	...	4.5	4.7	4.8	5.1	5.1	5.0	4.8	4.5	4.4	...	...
25	...	4.2	4.5	4.5	4.9	4.8	p4.8c	4.8	4.7	4.9	4.7	...	...
26	...	4.3	4.5	4.8	4.9	4.8	5.0	p4.9	4.9	4.4	4.3	...	...
27	...	4.2	4.6	4.8	4.8	4.8	4.9	4.7	4.7	4.6	4.4	...	...
28	...	...	4.4	p4.6	p4.7c	4.7	4.8	4.9	4.8	4.5	4.3	...	...
29	...	4.5	4.4	4.6	4.9	4.9	5.1	4.8	4.7	4.5	4.3	...	...
30	...	4.3	4.3	4.7	4.9	5.0	4.9	4.9	4.8	4.7	4.4	...	...
31													
* MEAN	...	4.3	4.5	4.7	4.8	4.8	4.9	4.8	4.7	4.6	4.4	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	240	220	220	210	200	p200b	200	200	200	200	...	...
2	...	240	220	220	210	200	180	210	210	200	240	...	...
3	...	240	220	210	200	200	190	190	200	200	200	...	...
4	...	...	230	220	210	200	190	200	190	200	230	...	...
5	...	...	230	220	210	210	200	190	200	190	190	...	...
6	...	240	210	220	210	200	200	200	200	200	230	...	...
7	...	230	200	210	220	210	210	200	p200c	200	190	...	...
8	...	240	220	p220c	220	p210c	210	220	p210c	200	210	...	...
9	...	...	230	220	p210c	p210c	200	200	200	210	p220c	...	...
10	...	240	220	220	200	...c	...c	...c	...c	...c	...c	...	...
11	...	...	240	...c	...c	...c	...c	...c	...c	...c	...c	...	...
12	...	240	220	220	210	210	220	200	230	220	220	...	...
13	...	...	230	220	210	210	210	210	210	p220c	p220c	...	...
14	...	...	230	220	210	200	210	200	200	200	210	...	...
15	...	240	230	220	210	200	200	200	230	220	...	...	...
16	...	...	230	220	210	200	200	200	200	200	230	...	...
17	...	...	220	220	210	210	210	210	210	210	240	...	...
18	...	...	210	210	210	220	210	210	210	210	220	...	...
19	...	230	230	220	220	210	210	200	200	200	230	...	...
20	...	...	230	220	210	200	200	200	190	200	230	...	...
21	...	240	230	210	210	200	200	200	p200c	230	230	...	...
22	...	240	p230	p220	210	210	220	220	210	230	220	...	...
23	...	240	250	p220	200	210	200	210	200	210	210	...	...
24	...	...	230	220	220	200	200	200	200	200	230	...	...
25	...	230	230	220	210	200	p200c	200	200	210	200	...	...
26	...	p230	220	210	200	200	220	p200b	190	200	210	...	...
27	...	230	230	200	220	210	200	200	200	200	210	...	...
28	...	...	230	230	p220	p200	200	200	200	210	220	...	...
29	...	230	230	220	220	200	220	200	200	200	200	...	...
30	...	230	210	p210	200	200	190	200	200	180	210	...	...
31													
* MEAN	...	236	225	218	211	205	204	202	203	205	217	...	...

*= ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 210

APRIL 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1942

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.7	1.4	1.4	2.2	2.1	2.1	p2.4b	2.7	2.3	1.4	1.8	1.8	0.7
2	1.1	1.1	1.4	2.2	2.2	1.8	2.3	2.0	1.8	1.8	2.3	1.4	0.8
3	0.8	0.7	1.1	2.2	1.8	2.4	1.9	1.8	1.7	1.4	1.2	1.0	0.6
4	0.9	2.1	2.3	2.1	1.9	1.8	1.9	1.8	2.3	2.1	1.4	1.0	0.6
5	0.7	1.7	2.2	1.7	1.8	1.7	2.1	1.9	1.8	1.3	1.7	1.2	0.6
6	0.7	1.0	1.0	1.7	1.8	2.3	2.2	1.8	1.9	1.0	2.2	1.2	0.7
7	0.7	0.8	1.4	1.7	2.1	2.0	2.4	2.1	p1.9c	1.7	1.2	1.1	0.8
8	0.8	0.8	1.4	p1.8c	2.2	p2.2c	2.3	2.2	p1.8c	1.4	1.4	1.0	0.9
9	0.8	1.0	1.4	2.2	p2.2c	p2.3c	2.3	2.3	2.3	2.2	p1.8c	1.4	1.0
10	1.2	1.2	2.0	2.3	2.0	p2.2c	2.4	2.4	p2.0c	p1.7c	1.4	1.2	0.7
11	0.9	1.2	2.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
12	1.2	1.1	1.3	2.3	2.4	2.5	p4.0b	2.6	2.6	2.0	1.4	1.2	0.8
13	1.1	1.3	1.4	2.2	2.5	2.4	2.5	2.4	2.1	2.1	1.4	1.3	1.1
14	0.9	1.3	2.2	2.2	2.3	2.2	2.3	2.1	2.1	2.1	1.4	1.2	1.1
15	0.9	1.1	1.3	1.3	1.4	2.1	2.2	1.8	p4.1b	2.3	2.0	1.2	0.8
16	0.8	1.0	1.3	2.1	2.2	2.1	2.2	1.8	2.0	1.2	1.2	1.1	0.8
17	1.0	1.2	1.1	1.4	2.3	2.4	2.2	2.3	2.2	1.4	1.1	1.2	0.8
18	0.8	1.0	1.1	1.0	2.1	2.2	2.3	2.2	1.7	1.4	1.2	1.1	0.8
19	1.1	1.2	2.2	1.8	2.3	2.2	2.2	2.2	2.3	2.2	1.3	1.1	1.1
20	1.2	1.7	1.1	2.2	2.2	2.4	2.3	2.0	1.8	2.0	1.2	1.1	1.0
21	1.2	1.2	1.2	2.2	2.2	2.3	2.0	2.2	p2.3	1.4	2.0	0.8	0.6
22	1.1	0.9	p1.2	1.4	2.3	2.9	2.3	2.3	2.3	1.5	1.3	0.9	0.9
23	1.2	0.9	1.2	1.4	1.4	2.0	2.4	2.3	2.3	2.1	1.1	1.1	0.9
24	0.8	0.8	1.2	2.2	2.2	1.8	2.0	2.4	2.2	1.5	1.2	1.1	0.8
25	0.9	0.9	1.2	1.4	2.2	2.2	p1.8c	1.5	2.0	1.4	1.2	1.1	p1.0
26	0.9	p1.1	1.2	2.2	2.0	2.2	2.0	p2.2b	2.2	1.4	1.3	1.2	0.8
27	0.9	1.1	1.3	1.4	2.2	2.2	2.0	2.0	2.1	1.3	p1.2	1.1	0.8
28	0.9	p1.0	1.3	2.2	p2.2c	2.2	1.9	2.1	1.4	1.3	1.3	1.0	0.8
29	1.1	1.0	1.4	2.0	2.0	2.0	p2.2b	2.2	2.2	1.9	1.3	1.0	0.9
30	1.1	1.2	1.4	2.3	2.1	2.3	2.3	2.2	1.6	2.1	1.3	1.1	0.8
31													
MEAN*	0.9	1.1	1.4	1.9	2.1	2.2	2.2	2.1	2.1	1.7	1.4	1.2	0.8

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.9	2.4	3.0	3.2	3.5	3.7	p3.9b	4.2	3.7	3.4	2.9	2.4	1.8
2	1.6	2.4	2.8	3.5	3.7	3.8	3.8	3.7	3.4	3.1	3.0	2.3	1.3
3	1.4	2.2	2.7	3.4	3.5	3.7	3.8	3.6	3.4	3.1	2.7	2.3	1.2
4	0.9	2.3	3.4	3.3	3.5	3.5	3.5	3.7	3.6	3.1	2.8	2.2	1.0
5	1.6	2.3	2.8	3.3	3.5	3.6	3.7	3.6	3.4	3.0	2.7	2.3	0.7
6	0.9	2.2	2.8	3.2	3.8	3.5	3.3	3.6	3.6	3.1	3.0	2.4	1.1
7	1.4	2.4	2.8	3.2	3.6	3.7	3.7	3.7	p3.4c	3.0	2.6	2.3	1.9
8	1.4	2.3	2.8	p2.8c	2.9	p3.4c	3.8	3.4	p3.2c	3.0	2.7	2.2	1.1
9	1.9	2.4	2.9	3.4	p3.5c	p3.6c	3.8	3.7	3.6	3.3	p2.8	2.3	1.1
10	1.4	2.3	2.5	3.5	3.6	...c	...c	...c	...c	...c	2.6	2.3	1.1
11	1.5	2.4	2.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
12	1.4	2.4	2.9	3.6	3.8	3.7	4.0	3.9	3.7	3.4	2.8	2.3	1.0
13	1.7	2.3	3.1	3.4	3.8	3.8	4.0	3.8	3.4	3.4	2.8	2.3	1.1
14	1.0	2.6	3.4	3.2	3.5	3.6	3.9	3.7	3.5	3.5	2.7	2.3	1.1
15	2.6	2.5	3.1	3.4	3.5	3.7	3.7	3.7	p4.1	3.5	2.8	2.3	1.2
16	1.5	2.5	2.8	3.4	3.6	3.8	3.9	3.7	3.5	3.3	2.5	2.2	1.1
17	1.5	2.2	2.8	3.4	3.1	3.8	3.8	3.8	3.5	3.4	2.8	2.2	0.8
18	1.5	2.6	2.4	3.4	3.6	3.5	3.8	3.5	3.4	3.4	2.8	2.2	1.1
19	1.5	2.5	3.2	3.4	3.7	3.7	3.8	3.8	3.8	3.5	3.0	2.2	1.2
20	1.5	2.5	3.1	3.5	3.6	3.8	3.7	3.6	3.5	3.4	2.9	2.3	1.1
21	1.5	2.4	3.0	3.4	3.5	3.5	3.8	3.6	p3.6c	3.3	3.0	2.3	0.6
22	1.4	2.4	p2.8	3.4	3.4	4.4	4.3	4.3	4.3	4.2	3.0	2.3	0.9
23	1.6	2.6	3.4	p4.-	3.3	3.5	3.8	3.7	3.5	3.4	2.8	2.3	1.2
24	1.4	2.4	3.1	3.4	4.0	3.8	3.9	4.0	3.6	3.5	2.8	2.3	1.2
25	1.5	2.5	3.0	3.4	3.7	3.8	p3.8c	3.8	3.5	3.4	2.8	2.2	p1.8
26	1.4	p2.3	2.9	3.5	3.6	3.8	3.9	p4.5b	3.5	3.3	2.8	2.2	1.1
27	1.5	2.4	2.9	3.4	3.6	3.8	3.9	3.7	3.5	3.4	p2.8	2.1	0.9
28	1.5	p2.2	3.0	3.4	p3.5c	p3.6c	3.8	3.6	3.5	3.5	2.7	2.2	1.0
29	1.4	2.4	3.0	3.4	3.7	3.7	p3.6b	3.6	3.5	3.4	3.8	2.2	0.9
30	1.4	2.4	2.9	3.5	3.7	3.8	3.9	3.7	3.7	3.1	2.8	2.2	1.3
31													
MEAN*	1.5	2.4	2.9	3.4	3.6	3.7	3.8	3.8	3.6	3.3	2.8	2.3	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 211

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1942

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	8.2	8.3	6.9	5.3	4.7	4.5	6.1	8.0	9.2	10.8	10.4	9.5	8.6	7.9	8.4	9.1	9.1	9.5	9.7	9.4	8.9	8.9	8.0	7.4	8.2
2	6.7	6.4	6.3	6.7	5.9	5.5	4.4	7.4	9.0	9.6	8.4	7.5	7.8	8.2	8.8	9.6	9.6	9.2	9.0	8.4	8.2	8.8	8.3	7.4	7.8
3	6.9	6.1	5.1	4.4	3.7	3.0	4.4	7.4	8.5	9.3	8.9	8.1	7.5	7.5	7.9	8.0	8.5	8.7	8.3	7.7	7.3	7.2	6.8	6.2	7.0
4	6.1	6.6	6.1	4.4	3.8	3.7	4.7	7.2	8.6	p8.9	8.0	7.8	7.6	8.4	8.4	7.9	7.8	7.8	7.8	6.4	6.4	8.0	8.2	7.6	7.2
5	7.3	5.1	4.6	4.8	4.3	4.0	5.1	7.1	8.5	10.0	10.3	10.2	9.7	9.3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	6.5	5.6	5.7	6.7	6.2	6.5	...
7	5.6	5.6	6.5	5.6	5.2	4.2	p4.1	6.4	8.5	p9.2	8.9	8.5	8.1	7.7	8.5	9.3	8.4	8.5	8.2	7.3	6.9	7.2	7.8	6.3	7.2
8	5.3	5.2	4.4	3.6	3.6	3.2	4.0	6.3	7.7	8.2	7.5	7.3	7.2	7.0	p8.0c	p8.3c	p7.7	7.6	7.4	7.0	6.6	7.7	6.3	p5.7	6.4
9	4.7	5.2	5.0	4.5	p3.7	3.3	3.8	7.0	8.4	9.6	9.9	9.8	9.1	8.7	8.8	9.1	8.4	7.9	7.7	6.9	6.5	6.0	5.9	5.2	6.9
10	5.2	5.7	5.1	4.8	4.2	4.3	4.6	6.6	7.8	8.2	8.0	8.3	8.2	8.0	8.4	8.6	8.4	8.1	7.2	5.8	6.6	6.7	6.6	6.0	6.7
11	5.7	5.8	5.2	3.6	3.0	p3.1	4.3	6.9	7.9	8.3	8.1	8.4	8.5	8.1	8.9	8.7	8.5	8.5	7.4	6.3	5.5	6.1	6.2	5.6	6.6
12	6.1	5.5	5.1	4.5	4.1	3.2	4.2	7.2	8.8	9.4	8.4	7.6	7.1	7.4	7.8	8.8	9.2	9.2	8.0	7.1	7.1	7.1	7.2	6.9	7.0
13	6.1	5.6	5.1	3.5	3.4	3.1	4.0	6.2	7.4	7.4	7.5	7.6	7.7	8.0	8.0	8.4	9.5	9.0	8.7	7.7	8.0	8.8	7.9	6.5	6.9
14	5.9	5.2	3.3	3.0	3.3	p3.4f	3.7	7.2	8.1	7.7	p7.9c	8.1	8.3	8.6	8.9	p9.5c	p10.0	9.6	9.7	10.0	9.0	8.9	8.7	8.0	7.3
15	7.6	8.0	7.4	5.5	4.4	3.3	4.3	7.1	8.4	8.5	7.9	7.8	8.0	8.2	8.4	8.1	8.0	7.9	8.0	7.2	7.8	8.2	7.2	6.8	7.2
16	7.5	6.3	6.6	4.6	4.3	4.3	5.3	7.3	9.0	9.6	9.0	8.0	7.6	7.4	7.8	8.5	9.0	8.8	8.4	7.9	8.4	8.1	7.0	6.6	7.4
17	5.9	5.5	4.5	3.5	2.8	2.2	4.1	7.2	8.5	9.5	9.8	8.9	8.0	8.0	8.4	8.7	9.1	8.9	8.7	7.7	7.2	6.7	6.1	5.3	6.9
18	6.5	6.4	5.3	4.7	4.4	4.1	4.8	7.7	9.0	10.0	8.8	8.4	8.0	8.4	8.4	8.5	8.4	8.0	7.7	7.2	6.4	5.8	5.7	6.0	7.0
19	5.6	5.3	4.9	4.3	3.8	3.7	4.8	7.2	7.9	8.9	8.7	8.0	7.5	7.2	7.3	8.0	8.4	8.4	8.2	8.0	8.0	8.5	8.5	6.3	7.0
20	5.0	4.3	3.7	3.3	3.4	3.5	4.8	7.2	8.2	p9.3	8.8	8.4	7.6	7.6	8.0	7.8	p7.9	7.9	7.4	7.1	7.6	7.3	6.8	7.3	6.7
21	6.7	7.0	5.3	3.6	3.1	2.7	4.2	7.1	9.0	9.4	8.7	7.9	7.8	7.6	7.3	7.5	7.3	7.5	7.3	7.2	7.6	7.8	6.8	7.0	6.8
22	5.5	4.7	3.7	2.3	p1.9	p2.7f	3.6	6.5	7.8	9.2	9.0	8.7	8.4	8.0	8.5	8.8	8.5	8.8	8.4	7.8	7.2	7.4	7.5	7.6	6.8
23	6.3	5.5	5.0	4.3	4.2	3.8	3.4	6.8	8.4	9.1	8.8	9.1	8.9	8.6	8.7	8.8	8.5	8.4	7.8	7.3	7.5	7.4	6.9	6.5	7.1
24	5.7	5.2	4.9	4.2	3.9	3.5	4.0	6.3	7.4	7.5	7.8	7.0	7.7	7.8	7.5	8.3	7.7	7.6	7.8	6.9	p6.9f	p7.0f	7.0	6.2	6.5
25	6.5	5.9	6.2	5.4	4.2	3.9	4.3	6.3	7.8	8.4	7.9	7.3	7.1	7.7	7.9	8.2	8.0	7.8	7.4	7.6	7.7	7.8	7.2	6.6	6.9
26	5.8	5.5	4.4	2.9	2.1	2.0	2.9	5.3	6.6	p7.2c	7.0	6.7	6.8	6.4	6.2	p6.6c	p7.5c	7.3	7.8	6.9	6.3	7.0	6.5	5.6	5.8
27	6.0	6.0	5.7	6.0	4.7	4.1	2.9	5.9	7.4	8.7	8.3	7.0	6.8	6.7	7.7	7.8	7.6	6.6	7.6	p8.0c	p7.2c	p7.2c	p7.2c	p7.2c	6.7
28	7.2	5.5	5.3	4.6	4.8	4.7	3.0	5.7	7.4	p7.8	7.8	7.8	8.3	8.3	8.5	7.6	p8.0c	p7.5c	p7.0c	6.5	6.8	7.5	7.6	6.5	6.7
29	6.3	6.6	5.4	4.8	3.3	2.9	2.9	5.7	6.8	8.1	7.6	7.4	7.2	7.0	7.0	7.1	7.4	7.3	7.1	6.6	6.9	7.1	7.2	6.3	6.3
30	5.7	5.3	5.2	4.1	3.1	2.5	3.5	6.1	7.5	7.8	7.4	7.6	7.3	7.4	7.3	7.5	7.0	7.3	8.3	7.2	7.5	7.5	6.8	5.9	6.4
31	5.3	5.6	4.7	2.4	2.8	2.4	3.0	5.5	6.6	6.5	6.6	6.7	7.3	7.3	7.4	7.5	7.7	7.5	6.8	6.7	7.1	7.6	5.8	5.1	6.0
* MEAN	6.2	5.8	5.2	4.3	3.8	3.5	4.1	6.7	8.1	8.7	8.4	8.0	7.9	7.8	8.0	8.3	8.3	8.2	7.9	7.4	7.3	7.5	7.1	6.5	6.9

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 212

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1942 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — MAY 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	210	220	200	230	300	330	260	250	250	280	280	290	320	340	320	310	280	260	280	310	280	270	220	200	270
2	210	230	230	220	270	240	250	260	270	300	290	320	330	320	300	290	290	260	270	290	240	220	230	230	265
3	210	210	230	230	240	240	240	240	220	280	320	350	330	320	340	300	280	250	280	290	290	270	230	230	268
4	210	200	190	220	250	280	280	255	270	310	310	330	330	340	310	290	280	250	270	300	280	270	220	220	269
5	210	240	280	300	330	280	280	270	270	280	300	315	310	300	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	310	340	310	260	210	220	...
7	230	230	220	240	230	260	260	270	270	290	325	330	330	340	340	300	280	250	280	300	280	240	210	230	272
8	240	240	210	230	220	240	270	280	280	300	320	350	340	350	q320c	q280c	250	240	300	340	310	240	200	220	274
9	220	220	220	220	270	320	250	260	260	260	310	330	340	330	330	300	270	240	270	300	280	240	230	220	270
10	220	220	230	230	220	220	250	270	300	300	320	330	350	340	330	300	360	230	310	370	350	280	240	220	279
11	210	210	210	230	250	260	270	270	290	300	320	330	320	320	330	300	300	250	300	340	340	260	210	210	276
12	210	220	220	230	230	230	270	270	270	300	330	340	340	320	330	290	220	240	290	310	280	250	220	220	268
13	200	210	210	240	240	240	270	280	290	320	330	320	330	330	330	330	280	245	300	330	250	220	210	225	272
14	220	200	220	250	310	400	280	270	300	290	q300c	310	320	320	300	q290c	280	250	250	250	240	240	220	220	272
15	230	230	210	230	230	250	260	240	270	320	360	360	340	315	290	280	270	250	280	280	250	230	210	220	267
16	210	200	210	240	250	260	260	260	280	290	300	390	340	310	300	300	270	240	280	280	240	200	210	210	264
17	210	200	220	220	220	230	250	240	250	280	310	320	310	300	300	280	275	250	280	310	310	280	210	200	261
18	220	220	230	240	240	230	250	260	270	290	300	370	320	320	310	300	280	250	300	310	300	280	230	220	272
19	220	210	220	230	240	240	230	250	290	300	360	340	400	330	340	290	280	250	270	200	250	220	200	200	265
20	200	220	220	240	260	260	240	250	260	300	330	360	300	380	360	300	300	240	280	250	240	240	220	220	270
21	210	200	210	220	250	260	270	270	280	290	300	370	370	360	360	315	280	250	280	270	240	240	220	220	272
22	210	210	210	240	330	470	270	260	270	310	310	350	350	330	320	290	275	250	260	280	270	260	220	210	281
23	210	220	220	260	270	240	260	280	280	290	300	340	340	300	300	290	280	230	280	270	260	210	200	210	264
24	210	210	230	230	250	250	270	290	300	300	350	360	370	340	330	320	290	260	260	270	250	260	220	220	277
25	220	210	220	220	220	220	270	270	290	320	340	360	370	360	330	300	270	240	230	260	220	230	220	210	267
26	220	210	210	220	240	260	270	230	280	q320c	360	370	370	330	400	q350c	q290c	240	240	230	250	260	240	240	276
27	220	210	220	210	230	260	260	240	280	300	320	370	370	300	320	300	300	250	260	260	250	240	230	210	267
28	200	220	210	270	290	290	270	230	300	300	290	330	320	350	330	280	330	q320c	q300c	290	260	260	220	230	279
29	210	230	220	220	220	250	260	240	280	270	310	340	340	320	350	350	300	340	250	250	250	230	230	220	270
30	220	230	210	210	230	230	260	230	270	290	320	340	350	370	360	300	300	250	260	230	240	230	220	220	265
31	230	200	180	230	220	230	270	280	300	300	320	350	350	370	330	340	270	240	250	240	230	230	220	230	267
MEAN*	215	216	217	233	252	266	262	259	276	296	318	342	340	332	328	302	284	252	276	282	268	245	219	218	271

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 213

MAY 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1942

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.3	4.3	4.5	4.6	4.8	4.9	5.0	4.8	4.8	4.6	...	...
2	...	3.9	4.3	4.6	4.6	4.6	4.7	4.7	4.8	4.7	4.4	...	...
3	...	4.2	4.4	4.5	4.7	4.9	4.8	4.7	4.8	4.6	4.4	...	...
4	...	4.0	4.4	4.8	4.7	4.8	4.7	4.6	4.5	4.3	4.2	...	...
5	...	4.0	4.4	4.5	4.6	4.8	4.7	4.6	p4.5c	p4.4c	p4.3c	...	...
6	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
7	...	4.0	4.4	4.5	4.7	4.8	4.8	4.9	4.5	4.4	4.3	...	...
8	...	4.2	4.4	4.5	4.7	4.9	4.9	4.7	p4.5c	p4.3c	4.1	...	...
9	...	4.0	4.2	4.5	4.7	4.8	4.7	4.7	4.6	4.3	4.1	...	...
10	...	4.2	4.5	4.6	4.7	4.7	4.8	4.7	4.6	4.5	4.0	...	...
11	...	3.9	4.5	4.5	4.7	4.7	4.7	4.8	4.7	4.4	4.4	...	...
12	...	4.1	4.3	4.5	4.7	4.7	4.8	4.6	4.7	4.4	4.2	...	...
13	...	4.2	4.3	4.5	4.6	4.8	4.8	4.7	4.9	4.7	4.2	...	...
14	...	4.1	4.7	4.5	p4.6c	4.6	4.7	4.8	4.5	p4.4c	4.4	...	...
15	...	...	4.3	4.9	5.0	4.9	4.8	4.7	4.6	4.5	4.2	...	...
16	...	4.2	4.5	4.6	4.7	5.1	4.8	4.6	4.5	4.5	4.3	...	...
17	...	4.1	4.5	4.6	4.7	4.8	4.8	4.7	4.6	4.5	4.3	...	...
18	...	4.3	4.3	4.4	4.6	4.9	4.7	4.7	4.5	4.4	4.2	...	...
19	...	4.2	4.6	4.6	5.0	4.7	5.2	4.6	4.5	4.4	4.3	...	...
20	...	4.0	4.6	4.7	4.9	4.8	4.8	5.0	4.8	4.4	4.6	...	...
21	...	4.3	4.4	4.5	4.7	4.8	4.8	4.7	5.0	4.4	4.2	...	...
22	...	4.2	4.4	4.6	4.6	4.8	4.7	4.8	4.6	4.4	4.1	...	...
23	...	4.3	4.4	4.5	4.5	4.6	4.7	4.5	4.4	4.4	4.3	...	...
24	...	4.0	4.4	4.5	4.6	4.7	4.7	4.5	4.5	4.4	4.3	...	...
25	...	...	4.3	4.6	4.6	4.7	4.7	4.6	4.4	4.3	3.9	...	...
26	...	...	4.4	p4.5c	4.5	4.6	4.5	4.4	4.6	p4.5c	p4.3c	...	...
27	...	...	4.5	4.5	4.4	4.6	4.5	4.4	4.2	4.6	4.2	...	...
28	...	...	4.5	4.5	4.4	4.6	4.5	4.5	4.5	4.2	4.5	...	...
29	...	...	4.5	4.4	4.3	4.5	4.5	4.4	4.5	4.4	4.2	...	...
30	...	...	4.3	4.4	4.4	4.6	4.5	4.5	4.5	4.3	4.0	...	...
31	...	...	4.4	4.3	4.3	4.5	4.4	4.4	4.3	4.3	4.1	...	...
* MEAN	...	4.1	4.4	4.5	4.6	4.7	4.7	4.6	4.6	4.4	4.2	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	220	200	210	200	190	p200	200	200	220	...	...
2	...	230	230	210	205	200	200	200	200	200	240	...	...
3	...	230	220	210	200	200	190	200	190	190	200	...	...
4	...	250	220	210	210	210	200	200	200	190	190	...	...
5	...	240	220	220	220	210	200	200	p200c	p210c	p220c	...	...
6	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
7	...	230	220	200	200	200	200	190	180	200	200	...	...
8	...	230	220	210	200	200	190	200	p200c	p210c	220	...	...
9	...	240	220	210	210	210	210	200	210	200	200	...	...
10	...	240	220	210	210	210	200	200	200	210	220	...	...
11	...	240	220	210	210	210	190	190	200	200	230	...	...
12	...	240	220	210	200	200	200	190	190	190	230	...	...
13	...	230	220	210	200	200	200	190	190	200	220	...	...
14	...	230	220	210	p200c	200	200	200	200	p210c	230	...	...
15	...	...	220	210	200	200	200	200	200	200	210	...	...
16	...	240	220	210	190	190	200	200	200	200	210	...	...
17	...	230	220	190	210	190	190	190	190	200	200	...	...
18	...	240	220	210	200	190	200	200	190	200	220	...	...
19	...	230	210	200	210	200	200	200	190	200	200	...	...
20	...	230	230	210	210	200	200	200	200	200	p190	...	...
21	...	230	220	210	205	200	200	190	200	200	210	...	...
22	...	245	220	220	200	200	200	200	200	200	220	...	...
23	...	240	220	210	220	210	200	200	200	200	210	...	...
24	...	230	220	210	210	200	200	190	190	190	190	...	...
25	...	...	210	200	210	210	200	200	200	190	200	...	...
26	...	...	200	p200c	200	200	200	200	200	p200c	p220c	...	...
27	...	...	220	210	200	200	200	190	200	200	210	...	...
28	...	...	230	190	190	200	210	200	200	210	210	...	...
29	...	...	220	210	200	200	190	190	190	190	210	...	...
30	...	...	220	210	200	200	200	190	200	190	210	...	...
31	...	...	210	210	200	200	200	200	200	180	200	...	...
* MEAN	...	235	219	208	204	201	199	197	197	199	211	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD. ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 214

MAY 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1942

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.4	2.2	1.8	2.3	2.5	2.3	p2.1	2.0	1.4	1.2	0.9	0.8
2	1.1	1.8	1.3	1.7	1.9	2.1	1.9	2.0	2.1	1.3	1.2	1.2	0.9
3	1.2	1.3	1.4	2.0	2.3	2.2	2.1	2.0	1.8	1.4	1.2	1.0	0.9
4	0.8	0.9	1.2	1.8	2.1	1.8	1.8	1.9	2.0	1.3	1.2	1.0	1.0
5	0.8	0.9	1.2	1.3	1.8	1.8	2.2	2.3	...c	...c	...c	...c	...c
6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	0.9
7	0.8	0.9	1.2	1.2	2.0	1.8	1.7	2.0	1.3	1.2	1.2	0.9	0.8
8	0.8	1.1	1.1	1.3	1.4	1.3	1.9	2.1	p1.8c	p1.5c	1.2	1.1	1.0
9	1.0	1.1	1.1	2.0	1.7	1.7	2.0	1.8	1.6	2.0	1.1	1.0	0.8
10	1.0	1.1	1.2	1.4	2.2	2.0	1.7	1.7	1.8	1.4	1.1	1.1	0.8
11	0.8	1.0	1.2	1.2	1.5	2.0	1.8	2.1	2.1	1.6	1.1	1.0	1.0
12	1.0	0.9	1.3	2.0	2.2	1.8	1.8	1.7	1.8	1.7	1.1	0.8	0.9
13	1.0	1.2	1.2	1.7	2.0	2.1	1.8	1.8	1.8	1.7	1.1	0.9	0.9
14	0.8	1.0	1.1	1.2	p1.5c	1.8	2.0	1.8	1.3	p1.2c	1.0	0.9	0.8
15	0.9	1.0	1.2	1.4	1.7	1.8	1.8	1.7	1.7	1.2	1.1	1.0	0.8
16	0.8	1.1	1.3	1.7	2.0	1.8	1.7	1.8	1.8	1.7	1.2	1.2	0.9
17	1.1	1.7	1.9	2.0	1.8	1.8	2.1	1.8	1.7	1.7	1.2	1.1	0.9
18	1.0	1.0	1.7	1.7	1.7	1.7	1.9	1.7	1.6	1.6	1.5	1.2	0.8
19	1.0	1.2	1.2	1.4	1.6	1.7	1.7	1.8	2.0	1.3	1.1	1.1	1.0
20	1.0	1.2	1.5	1.7	1.6	1.7	1.7	1.8	1.7	1.2	1.1	1.0	0.9
21	1.0	1.2	1.1	1.7	1.8	1.8	1.9	1.8	1.8	1.7	1.2	1.1	0.9
22	1.0	1.2	1.3	1.8	1.7	1.8	1.7	1.7	1.7	1.3	1.3	1.1	0.8
23	0.9	1.1	1.3	1.7	1.7	1.7	1.7	1.7	1.9	1.7	1.3	1.1	1.0
24	0.9	1.0	1.1	1.2	1.4	1.7	1.7	1.8	1.4	1.0	1.0	1.0	0.9
25	1.0	1.1	1.2	1.2	1.7	1.7	1.7	1.9	1.4	1.3	1.3	1.1	0.9
26	0.9	1.0	1.6	p1.7c	1.8	1.7	1.7	1.8	p1.6c	p1.4c	p1.2c	1.1	0.8
27	1.0	1.1	0.9	1.7	1.7	1.7	1.7	1.6	1.6	1.8	1.1	1.0	0.9
28	0.8	1.0	1.0	1.8	1.6	1.8	1.7	1.7	1.7	1.7	1.4	p1.1c	p0.9c
29	0.8	1.1	1.7	1.7	1.7	1.8	1.8	1.8	1.7	1.7	1.7	1.3	1.0
30	0.8	1.0	1.4	1.6	1.8	1.6	1.8	1.8	1.7	1.6	1.1	1.0	1.1
31	0.8	1.2	1.7	1.7	1.7	1.8	1.8	1.7	1.9	1.6	1.2	1.1	1.0
*MEAN	1.0	1.1	1.3	1.6	1.8	1.8	1.8	1.8	1.7	1.5	1.2	1.1	0.9

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.6	2.4	3.0	3.4	3.7	3.9	3.8	p3.0	3.5	3.2	2.8	2.1	1.0
2	1.3	2.3	2.9	3.4	3.4	3.6	3.6	3.5	3.5	3.1	2.9	2.1	0.9
3	1.3	2.4	2.9	3.4	3.6	3.6	3.6	3.5	3.5	3.0	2.6	2.0	0.9
4	0.8	2.4	2.9	3.5	3.5	3.6	3.5	3.5	3.5	3.0	2.6	2.0	1.5
5	1.1	2.4	2.9	3.4	3.6	3.5	3.6	3.5	...c	...c	...c	...c	...c
6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	0.9
7	1.3	2.3	2.8	3.1	3.7	4.0	3.9	3.7	3.5	3.2	2.6	1.8	0.8
8	1.4	2.4	2.8	3.2	3.6	4.0	4.0	4.1	p3.6c	p3.2c	2.7	2.1	1.2
9	1.4	2.5	3.0	3.3	3.5	3.7	3.6	3.7	3.4	3.0	2.8	2.2	1.2
10	1.4	2.4	2.9	3.2	3.4	3.6	3.6	3.5	3.4	3.7	2.2	2.2	0.8
11	1.4	2.4	2.9	3.2	3.2	3.6	3.6	3.4	3.5	3.5	3.4	2.4	1.0
12	1.4	2.4	2.9	3.3	3.3	3.5	3.6	3.6	3.4	3.3	2.8	2.2	0.9
13	1.4	2.4	2.8	3.3	3.5	3.8	3.6	3.4	3.3	3.1	2.5	2.0	1.0
14	1.3	2.3	2.7	3.3	p3.5c	3.7	3.6	3.4	3.3	p2.7c	2.1	2.0	0.8
15	1.3	2.4	2.8	3.3	3.5	3.6	3.6	3.4	3.4	3.0	2.4	1.9	0.8
16	1.4	2.4	2.9	3.3	3.5	3.6	3.7	3.5	3.4	3.1	2.7	2.1	1.0
17	1.4	2.4	2.9	3.2	3.5	3.6	3.8	3.6	3.3	3.0	2.6	2.0	0.9
18	1.4	2.4	2.9	3.0	3.4	3.3	3.5	3.4	3.3	3.0	2.5	2.0	1.1
19	1.4	2.4	2.8	3.2	3.5	3.5	3.5	3.5	3.4	3.0	2.6	2.0	1.0
20	1.3	2.4	2.9	3.3	3.4	3.5	3.6	3.5	3.4	3.1	1.4	2.0	0.9
21	1.4	2.4	2.0	3.2	3.4	3.5	3.6	3.5	3.6	3.0	3.6	1.8	0.9
22	1.4	2.4	2.9	3.3	3.4	3.5	3.5	3.4	3.4	2.9	2.5	1.7	0.9
23	1.2	2.3	2.6	3.2	3.3	3.4	3.5	3.4	3.3	3.0	3.6	1.9	1.0
24	1.2	2.1	2.4	2.8	3.2	3.3	3.4	3.4	3.3	2.9	2.6	1.4	0.9
25	1.4	2.3	2.6	2.9	3.4	3.4	3.5	3.4	3.3	2.8	2.5	2.0	0.9
26	1.3	2.2	2.7	p3.0c	3.3	3.4	3.5	3.5	p3.2c	p2.9c	p2.5c	2.0	0.8
27	1.3	2.4	2.8	3.1	3.3	3.4	3.5	3.2	3.0	3.0	2.4	1.8	0.9
28	1.3	2.2	2.5	3.0	3.2	3.3	3.5	3.4	3.2	2.9	2.6	p1.8c	p0.9c
29	1.1	2.2	2.4	3.0	3.3	3.3	3.4	3.4	3.2	2.8	2.4	2.0	1.0
30	1.1	2.2	2.5	3.0	3.2	3.4	3.4	3.5	3.2	2.8	2.5	1.8	1.1
31	1.2	2.4	2.7	3.0	3.4	3.5	3.5	3.3	3.1	2.9	2.3	1.9	1.0
*MEAN	1.3	2.3	2.8	3.2	3.4	3.6	3.6	3.5	3.4	3.0	2.6	2.0	1.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 215

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1942 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JUNE 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	4.6	4.6	4.9	4.1	3.8	3.2	2.7	...c	...c	...c	...c	...c	...c	...c	6.1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
2	4.5	3.8	3.3	2.9	2.7	2.5	2.9	5.6	p6.0c	p5.9c	p5.8c	5.7	5.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	5.4	4.9	...
3	4.7	4.0	3.9	3.7	2.2	p1.8b	3.0	5.3	...c	...c	...c	...c	...c	6.5	6.7	...c	...c	...c	...c	...c	...c	...c	...c	4.9	...
4	3.8	3.3	2.9	2.7	2.5	2.1	3.3	p5.7c	p7.0c	p7.1c	p7.3c	7.5	7.3	7.5	7.0	6.4	7.0	8.3	8.3	7.5	6.3	7.0	6.7	5.2	5.8
5	4.9	4.5	3.3	3.4	1.8	1.7	3.0	6.1	7.5	p7.2c	6.8	6.2	6.7	7.6	7.2	7.1	6.6	6.2	5.7	5.3	5.5	6.3	5.4	4.7	5.4
6	4.2	4.0	4.0	3.7	3.9	3.5	2.6	5.5	6.9	8.2	7.8	7.0	6.0	6.6	6.8	7.3	7.0	6.8	7.1	6.3	6.3	6.7	5.7	4.8	5.8
7	4.5	4.9	4.8	3.8	3.5	3.0	2.9	5.5	6.8	7.6	7.8	7.4	6.3	6.7	7.0	7.3	7.0	7.5	7.8	7.0	6.8	6.6	5.3	5.5	6.0
8	5.6	4.1	4.2	4.0	3.8	3.2	2.4	4.7	6.0	7.1	7.2	6.9	6.2	7.1	7.4	7.0	7.0	7.2	7.3	6.9	6.8	7.4	5.5	5.8	5.9
9	4.7	5.6	5.7	5.2	3.9	4.0	2.6	5.0	4.6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
10	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	6.8	7.4	7.3	7.1	p7.1c	6.6	6.5	5.7	6.4	7.0	5.3	5.5	...
11	4.9	5.2	5.7	5.1	4.3	4.0	3.8	5.1	6.7	6.6	6.4	6.8	6.3	7.1	7.4	6.8	7.9	8.4	8.3	7.4	7.0	7.4	7.4	6.8	6.4
12	5.5	5.5	5.6	4.7	3.9	2.7	2.8	5.0	6.8	p6.9c	6.9	p7.1c	p7.3c	p7.4c	p7.6c	7.8	8.4	8.1	8.4	7.0	7.7	7.5	6.5	5.8	6.4
13	5.0	4.1	3.4	2.0	1.9	p1.4b	2.8	5.3	6.6	6.3	6.2	6.2	6.0	7.2	7.7	7.3	7.7	8.5	p7.7c	6.2	6.7	7.5	6.6	5.8	5.7
14	4.7	4.5	4.5	4.6	4.5	3.2	1.4	4.7	6.0	6.6	6.7	6.5	6.4	6.2	6.6	6.9	7.2	7.1	6.7	p6.1	7.4	5.8	6.2	6.2	5.7
15	5.5	5.6	5.4	4.7	4.3	3.7	4.0	5.2	6.8	6.9	6.8	p6.6c	6.6	7.1	p6.7c	p6.8c	6.9	7.3	7.2	6.2	5.6	7.0	6.1	5.6	6.0
16	4.6	4.4	4.6	p4.3f	p4.2f	p3.3f	2.8	5.4	6.8	7.6	8.2	p6.5c	p6.6c	p6.8c	6.7	6.5	7.7	7.2	7.3	6.6	5.8	5.2	4.4	4.5	5.8
17	3.4	3.0	3.5	3.2	2.5	2.7	2.6	5.3	6.4	6.7	6.3	6.5	6.5	6.8	6.7	6.9	7.1	7.4	7.4	6.3	5.2	4.2	4.8	5.4	5.3
18	5.4	4.0	3.7	2.8	2.6	2.4	3.0	5.6	7.0	6.9	6.5	6.6	5.7	6.5	6.7	7.1	7.1	7.1	6.8	6.7	6.8	6.2	5.6	5.3	5.6
19	4.9	4.2	4.1	3.6	3.5	3.3	3.7	5.8	6.4	7.2	7.5	6.6	6.0	6.6	7.3	7.3	7.8	7.3	7.5	7.2	7.4	6.9	5.4	5.1	5.9
20	4.5	5.0	5.3	4.5	3.7	3.5	4.0	6.8	7.2	6.9	7.4	7.4	7.6	7.4	7.4	6.8	6.8	6.8	6.7	5.8	p5.5	6.4	4.0	3.5	5.9
21	3.1	2.7	2.7	2.4	2.3	1.9	2.7	4.0	6.4	p6.7c	6.6	6.6	6.2	6.4	6.3	6.6	6.5	6.9	6.7	5.9	6.2	7.1	5.6	5.6	5.2
22	4.6	3.4	3.7	3.7	4.4	3.6	2.4	4.8	5.9	6.8	6.5	6.6	6.6	6.7	7.0	7.0	7.1	7.4	6.6	5.8	5.8	6.6	6.3	4.8	5.6
23	3.6	3.1	3.0	3.2	3.0	2.8	2.4	5.1	5.8	6.4	6.4	7.0	6.5	7.0	6.6	7.0	6.4	6.3	6.2	5.8	4.9	4.4	4.4	4.3	5.1
24	4.5	4.5	3.7	3.5	2.5	2.3	2.3	4.7	5.5	6.8	6.7	6.6	6.7	7.0	7.4	7.2	7.2	6.9	6.9	6.6	6.4	6.3	6.0	5.6	5.6
25	6.4	5.4	5.2	3.3	2.3	2.2	2.4	4.3	5.7	5.9	5.8	6.2	7.0	6.9	7.6	8.0	6.8	6.8	6.5	5.9	6.0	6.2	5.8	4.8	5.6
26	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.6	8.0	8.2	8.9	8.2	7.7	6.4	p7.4c	6.6	5.6	5.0	...
27	p4.3c	p4.3c	p4.4c	p3.4c	2.5	2.4	2.3	5.3	6.2	p6.4c	p6.6c	p6.5c	p7.0c	p7.4c	p7.4c	p7.2c	p6.5c	p6.0c	7.7	p6.8c	5.5	5.2	4.8	4.7	5.4
28	4.1	3.8	4.1	3.4	1.9	1.6	2.5	5.6	6.4	6.8	6.6	6.0	6.6	6.8	6.7	7.0	7.0	7.3	6.1	5.3	5.3	5.2	5.4	4.8	5.3
29	4.5	3.9	4.1	3.4	3.0	p2.8f	2.4	5.1	6.8	p7.0c	7.1	7.5	7.1	7.1	6.9	7.0	7.1	6.9	6.5	5.8	5.1	5.6	5.4	5.5	5.6
30	5.0	p5.1f	p5.3f	5.5	4.8	4.1	2.5	4.8	5.6	5.8	6.0	5.5	6.2	6.5	6.2	6.4	6.8	6.3	6.2	6.2	6.3	6.9	5.7	4.7	5.6
31																									
MEAN*	4.6	4.3	4.2	3.7	3.2	2.8	2.8	5.2	6.4	6.8	6.8	6.6	6.6	7.0	7.0	7.1	7.2	7.2	7.1	6.3	6.2	6.4	5.6	5.2	5.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 216

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1942 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JUNE 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	230	230	260	270	280	270	...c	...c	...c	...c	...c	...c	...c	370	q330	300	240	250	260	250	240	230	220	...
2	230	230	240	270	280	320	270	260	300	330	360	400	360	390	q360c	290	300	230	250	270	250	250	250	240	289
3	240	240	240	220	260	240	270	280	310	390	360	390	390	390	380	q330c	320	250	260	270	260	240	220	230	291
4	240	230	240	240	260	270	260	240	260	300	310	340	360	350	310	350	320	240	250	250	240	250	210	220	272
5	220	220	230	200	240	290	250	230	260	q300c	360	390	360	370	350	360	330	260	290	280	230	220	220	220	278
6	220	230	240	270	260	270	260	230	290	300	330	390	400	380	380	350	300	240	250	260	250	240	230	250	284
7	250	200	220	270	270	260	260	240	280	310	320	380	340	330	330	330	350	240	250	250	240	240	240	230	276
8	230	230	220	240	230	240	270	230	300	340	300	370	350	380	350	310	280	250	250	240	250	220	230	230	272
9	240	230	220	210	230	240	260	230	300	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...c	...c	...c	330	350	320	320	300	240	250	260	240	230	250	270	...
11	270	240	240	240	250	270	270	230	360	330	350	420	380	320	330	300	320	240	240	270	270	240	230	220	285
12	240	250	230	220	230	230	270	240	320	310	340	q380c	q380c	q330c	q330c	360	290	250	250	260	240	230	220	210	275
13	230	230	220	220	230	260	270	230	310	320	340	380	380	340	330	320	310	240	290	290	280	230	230	220	279
14	230	245	240	240	220	230	270	240	340	350	360	380	400	390	390	370	290	260	290	270	260	230	240	240	291
15	250	270	240	240	230	230	280	230	300	310	340	q370c	380	350	q360c	q370c	q320c	230	250	250	240	240	200	220	279
16	230	240	260	270	260	240	250	240	300	300	330	q340c	q370c	q360c	330	390	270	230	230	230	250	250	230	230	276
17	230	230	240	250	290	280	250	230	320	350	410	420	370	380	350	390	300	240	250	290	340	360	280	230	303
18	220	240	220	260	250	270	270	230	290	330	360	380	400	390	340	360	300	230	280	320	340	300	260	240	295
19	250	250	260	280	290	300	300	250	300	300	300	340	390	390	330	320	300	230	240	230	230	230	230	230	282
20	270	270	280	320	300	300	270	240	280	330	330	330	340	390	360	340	300	250	280	280	270	230	230	230	292
21	230	240	240	260	260	260	260	230	330	q330c	370	360	350	370	330	370	360	220	250	270	230	220	230	210	282
22	220	220	240	270	300	280	280	230	320	330	350	390	380	410	400	330	330	220	240	240	230	230	230	220	287
23	230	240	230	230	240	260	260	240	320	320	320	380	440	360	390	380	300	240	270	310	290	280	290	230	294
24	210	240	260	230	220	280	270	230	320	330	350	400	330	340	340	340	310	240	250	270	290	250	250	260	284
25	230	220	220	240	240	240	270	230	310	350	350	380	370	400	360	320	210	240	260	280	290	240	250	260	282
26	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	350	340	320	300	230	240	240	240	220	230	220	...
27	230	220	230	270	310	260	260	240	q300c	340	310	390	330	410	340	360	330	240	240	220	220	220	230	220	280
28	220	220	210	210	260	310	270	230	300	340	350	400	400	390	350	330	320	230	260	300	320	320	280	250	295
29	230	230	260	220	240	370	280	230	290	q340c	340	370	380	360	330	q300	300	230	270	310	330	280	240	220	290
30	240	260	240	220	220	240	280	220	340	350	400	410	470	400	350	400	340	220	210	270	230	200	210	220	289
31																									
MEAN*	234	236	237	245	255	269	268	236	306	328	344	380	375	370	379	343	307	238	255	267	262	246	237	231	284

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 217

JUNE 1942 — JUNE 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...c	...c	...c	...c	...c	...c	...c	4.3	4.1	4.0	...	...
2	...	4.0	4.4	4.3	4.4	4.3	4.3	4.5	p4.3c	4.0	4.0	...	...
3	...	3.8	4.3	4.4	4.3	4.4	4.4	4.5	4.5	p4.2c	4.0	...	...
4	...	...	4.3	4.5	4.2	4.4	4.4	4.4	4.2	4.5	4.3	...	...
5	...	...	4.2	p4.3	4.4	4.4	4.4	4.4	4.4	4.3	4.3	...	...
6	...	...	4.5	4.3	4.4	4.5	4.5	4.5	4.3	4.2	4.0	...	...
7	...	...	4.4	4.3	4.4	4.5	4.4	4.5	4.3	4.4	4.4	...	...
8	...	...	4.2	4.3	4.3	4.6	4.4	4.4	4.3	4.2	4.2	...	...
9	...	...	4.4	...	...	...	...	...	...	...	...	...	...
10	...	...	p4.4	p4.4c	p4.6c	p4.5c	4.5	4.4	4.3	4.4	4.4	...	...
11	...	...	4.5	4.4	4.6	4.5	4.4	4.4	4.5	4.3	4.4	...	...
12	...	...	4.4	4.4	4.4	...c	...c	...c	...c	...c	4.3	...	...
13	...	...	4.4	4.3	4.3	4.4	4.5	4.5	4.3	4.2	4.4	...	...
14	...	...	4.2	4.3	4.3	4.6	4.5	4.5	4.5	4.4	4.2	...	...
15	...	...	4.5	4.5	4.5	p4.5c	4.5	4.5	p4.5c	p4.4c	4.4	...	...
16	...	...	4.4	4.3	4.3	p4.4c	p4.5c	p4.5c	4.4	4.5	4.3	...	...
17	...	...	4.4	4.4	4.7	4.4	4.3	4.5	4.4	4.5	4.3	...	...
18	...	...	4.3	4.4	4.5	4.4	4.5	4.4	4.4	4.2	4.1	...	...
19	...	...	4.3	4.3	4.3	4.4	4.3	4.4	4.3	4.3	4.4	...	...
20	...	...	4.5	4.5	4.5	4.5	4.5	4.7	4.3	4.5	4.2	...	...
21	...	...	p4.3c	p4.4c	4.5	4.3	4.4	4.4	4.4	4.5	4.4	...	...
22	...	...	4.4	4.2	4.2	4.4	4.3	4.3	4.3	4.1	4.1	...	...
23	...	...	4.4	4.3	4.3	4.4	4.4	4.3	4.4	4.2	4.0	...	...
24	...	...	4.3	4.2	4.3	4.4	4.3	4.4	4.3	4.4	4.2	...	...
25	...	...	4.1	4.5	4.3	4.4	4.3	4.5	4.2	4.1	p4.1c	...	...
26	...	...	...c	...c	...c	...c	...c	4.5	p4.4c	p4.3c	p4.2c	...	...
27	...	...	p4.1c	p4.2c	4.3	4.6	4.4	4.7	4.3	4.3	4.3	...	...
28	...	...	4.4	4.2	4.3	4.4	4.3	4.2	4.3	4.0	4.3	...	...
29	...	...	4.2	p4.3c	4.5	4.4	4.4	4.3	4.1	4.0	4.2	...	...
30	...	...	4.2	4.4	4.2	4.5	4.4	4.2	4.2	4.2	4.1	...	...
31													
MEAN*	...	3.9	4.3	4.2	4.4	4.4	4.4	4.4	4.3	4.3	4.2	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...c	...c	...c	...c	...c	...c	...c	200	210	200	...	...
2	...	230	230	210	200	190	190	180	p200c	200	210	...	...
3	...	250	220	210	210	200	190	200	220	p220c	210	...	...
4	...	...	220	210	210	200	190	200	200	190	190	...	...
5	...	...	220	p210	200	190	200	200	210	190	200	...	...
6	...	...	220	210	200	200	200	200	200	200	200	...	...
7	...	...	200	210	200	200	200	190	200	180	200	...	...
8	...	...	210	210	200	190	200	200	200	200	200	...	...
9	...	...	210	...	...	...	...	...	...	...	...	...	...
10	...	...	220	p210c	p210c	p200c	p200	190	200	180	200	...	...
11	...	...	200	200	200	200	200	200	200	200	190	...	...
12	...	...	210	200	200	...	...	...	...	...	230	...	...
13	...	...	200	200	200	190	190	200	200	200	200	...	...
14	...	...	190	230	210	220	200	200	200	200	230	...	...
15	...	...	220	200	210	p200c	200	200	p200	p210	220	...	...
16	...	...	210	200	210	p200c	p200c	p200c	200	200	200	...	...
17	...	...	220	200	200	200	200	200	200	200	220	...	...
18	...	...	200	190	190	200	230	200	210	220	240	...	...
19	...	...	230	220	200	200	210	190	200	200	220	...	...
20	...	...	230	220	220	210	210	200	210	200	200	...	...
21	...	...	210	p210c	210	200	200	190	200	210	190	...	...
22	...	...	220	210	200	200	190	190	200	200	200	...	...
23	...	...	210	210	190	200	200	200	200	200	200	...	...
24	...	...	190	190	200	200	200	190	200	200	210	...	...
25	...	...	190	200	200	200	200	200	200	200	p220c	...	...
26	...	...	...c	...c	...c	...c	...c	180	p200c	220	200	...	...
27	...	...	230	220	200	200	190	200	200	200	210	...	...
28	...	...	230	190	200	200	210	200	200	200	200	...	...
29	...	...	220	p210c	210	220	220	200	200	200	220	...	...
30	...	...	200	210	190	200	210	200	190	200	200	...	...
31													
MEAN*	...	240	213	207	203	200	201	196	202	201	207	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 218

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1942 JUNE 1942

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	...c	...c	...c	...c	...c	...c	...c	2.2	2.0	1.3	1.1	0.7	1.1	...c	...c	...c	...c	...c	...c	...c	3.2	3.2	2.4	1.7	0.7
2	0.8	1.2	2.0	1.7	2.0	2.2	2.2	2.1	p2.1c	2.1	1.2	1.1	1.0	1.2	2.3	2.6	3.0	3.4	3.4	3.4	3.4	p3.3c	3.2	2.7	2.0	1.1
3	0.7	1.1	1.0	1.7	2.1	2.2	2.3	2.0	2.0	p2.0c	1.1	1.0	0.6	1.1	2.3	2.7	3.0	3.3	3.4	3.5	3.4	3.3	p2.8c	2.4	1.9	0.6
4	1.0	1.1	1.7	2.0	2.4	2.0	1.8	1.7	1.8	1.7	1.2	1.0	0.7	1.0	2.3	2.7	3.1	3.5	3.4	3.5	3.4	3.4	2.9	2.5	1.8	0.7
5	0.8	1.2	1.2	p1.5c	1.7	1.8	1.8	1.8	1.8	1.8	1.6	1.2	0.9	1.1	2.1	2.7	p3.1c	3.4	3.4	3.5	3.5	3.4	3.0	2.5	p2.0	0.9
6	0.8	1.1	1.2	1.6	1.7	1.7	1.8	1.8	1.8	1.7	1.2	1.2	0.9	1.0	2.2	2.8	3.1	3.4	3.5	3.6	3.5	3.4	2.9	2.6	2.0	1.0
7	0.8	0.8	1.2	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.6	1.2	0.8	1.0	2.3	2.6	2.9	3.4	3.5	3.5	3.6	3.5	2.9	2.6	2.0	1.1
8	0.8	0.8	1.1	1.7	1.8	1.7	1.8	1.8	1.8	1.7	1.2	1.2	0.9	1.2	2.3	2.6	3.0	3.4	3.6	3.6	3.6	3.5	3.0	2.6	1.9	1.4
9	0.9	1.1	1.6	...	...	...	...	...c	...c	...	...	...	...	0.9	2.2	2.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
10	...	...	...	...c	...c	...c	p2.3	1.8	2.4	1.8	1.8	1.4	0.6	...c	...c	...c	...c	...c	...c	...c	3.4	3.6	3.2	3.3	1.9	1.2
11	0.9	0.8	1.0	1.2	2.4	1.8	2.4	2.4	1.7	1.3	1.3	1.4	1.0	1.5	1.4	2.4	3.2	3.5	3.5	3.5	3.5	3.4	3.1	2.5	1.7	1.0
12	0.8	0.8	1.1	1.7	1.7	...c	...c	...c	...c	...c	1.7	1.2	1.1	1.3	1.7	2.4	2.8	3.0	...	...	...	...	...	3.4	2.7	2.0
13	0.8	1.1	1.7	1.8	1.8	1.8	2.0	1.9	1.8	1.8	1.7	1.2	0.8	1.2	2.1	2.7	3.0	3.4	3.5	3.5	3.5	3.5	3.0	2.5	2.0	0.8
14	1.0	1.2	1.4	1.8	p3.1	p3.1	p3.1	p3.1	1.8	1.8	1.4	1.6	1.0	1.2	2.3	2.6	3.4	3.5	3.7	3.6	3.6	3.5	3.1	3.2	1.9	1.4
15	1.1	1.4	1.8	1.8	1.8	p1.9c	2.0	1.8	p1.8c	p1.8c	p1.8c	1.0	0.8	1.1	1.4	3.1	3.1	3.6	p3.6c	3.6	3.5	p3.4c	p3.0c	2.4	2.1	0.8
16	0.8	1.7	1.8	1.8	2.3	p2.1c	p2.0c	p1.6c	1.8	1.4	1.6	1.0	1.0	1.0	2.2	2.7	3.0	3.4	p3.5	p3.6	p3.5	3.4	3.0	2.5	2.0	1.5
17	0.8	1.2	1.3	1.2	1.4	1.9	1.8	1.8	1.7	1.6	1.2	1.2	1.2	1.2	2.2	3.5	3.0	3.4	3.4	3.5	3.5	3.4	2.8	2.5	2.0	1.2
18	1.0	1.4	1.2	1.3	1.7	1.8	2.7	p3.4	p2.7	p3.3	1.4	1.1	p2.6	1.0	2.2	2.7	2.8	3.5	3.6	3.7	3.5	3.4	3.3	3.4	1.9	2.6
19	0.8	1.4	1.2	2.9	2.9	1.7	1.7	1.8	1.8	1.7	1.4	1.2	0.8	2.5	3.1	3.3	3.4	3.4	3.5	3.7	3.5	3.2	3.0	3.5	1.6	0.9
20	0.7	1.0	1.4	1.3	1.7	1.8	1.8	2.0	1.2	1.2	1.0	0.8	0.8	0.7	2.3	2.6	3.2	3.4	3.5	3.5	3.4	3.2	2.9	2.4	1.8	0.8
21	0.8	0.9	1.1	p1.4c	1.7	1.8	1.7	1.4	1.7	1.2	1.2	1.0	0.8	1.0	2.2	2.7	p3.1c	3.4	3.5	3.7	3.4	3.4	3.0	2.5	1.9	1.4
22	0.8	0.9	1.2	1.2	1.7	1.8	1.5	1.6	1.3	1.2	1.0	1.0	0.8	1.0	2.2	2.5	3.1	3.4	3.4	3.4	3.4	3.4	2.8	3.4	1.9	0.8
23	0.9	1.0	1.0	1.2	1.3	1.2	1.5	1.4	1.2	1.1	1.0	1.0	0.8	1.0	2.2	2.8	3.0	3.3	3.4	3.5	3.4	3.4	2.9	2.4	1.8	0.8
24	0.9	0.8	1.1	1.1	1.2	1.8	1.8	1.7	1.8	1.2	1.1	1.1	0.8	1.1	2.2	2.6	2.9	3.4	3.5	3.4	3.5	3.4	2.9	2.5	1.7	0.8
25	0.9	0.8	1.0	1.2	1.2	1.7	1.4	1.5	1.2	1.2	1.1	1.0	0.8	1.0	2.8	2.5	3.0	3.2	3.4	3.4	3.4	3.3	2.8	2.4	2.0	1.1
26	...c	...c	...c	...c	...c	...c	...c	1.7	1.7	p1.4	1.4	1.4	0.8	...c	...c	...c	...c	...c	...c	...c	3.4	p3.0c	2.5	2.5	2.0	1.1
27	0.8	1.3	1.4	1.4	1.4	1.4	1.5	1.2	1.3	1.0	1.1	1.2	1.0	1.2	2.2	2.4	2.5	3.4	3.5	3.4	3.4	3.4	2.9	2.5	1.9	1.0
28	1.0	1.1	1.1	1.1	1.2	1.4	1.7	1.4	1.3	1.2	1.0	0.8	0.9	1.1	2.2	2.7	2.8	3.1	3.4	3.4	3.4	3.0	2.9	2.5	2.0	0.9
29	1.0	1.1	1.5	p1.6c	1.8	1.4	2.1	1.8	1.8	1.4	1.0	1.0	0.9	1.2	2.2	2.4	p2.9c	2.5	2.6	3.7	3.4	3.0	2.8	2.4	1.8	0.9
30	0.8	0.8	0.9	1.1	1.1	1.3	1.8	1.5	1.2	1.0	1.1	0.9	0.8	1.0	2.1	2.4	2.4	3.1	3.4	3.4	3.4	3.0	2.7	2.4	1.8	0.8
31																										
MEAN*	0.9	1.1	1.3	1.5	1.8	1.8	1.9	1.8	1.7	1.6	1.3	1.1	0.9	1.2	2.2	2.7	3.0	3.4	3.5	3.5	3.5	3.3	3.0	3.7	1.9	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 219

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1942 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JULY 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	4.6	4.2	4.3	4.2	p4.0f	p3.6f	3.6	5.1	5.5	6.2	6.3	6.1	5.7	6.1	6.5	7.2	7.0	7.5	7.4	6.4	5.5	6.4	5.6	4.3	5.6
2	3.2	2.8	2.6	2.4	2.0	p3.1f	p3.6f	5.2	5.9	6.2	6.6	5.8	5.8	5.4	5.8	5.8	5.6	5.5	5.8	5.8	4.8	4.3	4.8	4.5	4.7
3	4.2	4.8	p4.4f	p4.0f	p3.6f	p2.8f	2.5	4.8	6.2	p6.2c	6.3	5.7	5.8	5.2	6.2	6.4	6.1	6.9	6.9	6.4	5.5	7.3	4.8	3.2	5.3
4	3.1	2.6	2.4	1.9	1.7	1.4	2.2	4.4	5.3	p5.5	5.5	p5.6c	p5.8c	p5.7c	p5.7c	p5.8c	5.8	5.8	5.7	5.4	6.2	p6.3	4.7	3.7	4.5
5	3.2	3.0	2.7	2.4	p2.2f	p1.9f	2.5	5.1	5.8	5.9	5.3	5.6	p5.9c	p5.8c	p5.5c	p6.1c	p6.2c	p6.7c	p6.7c	p6.0c	p5.6c	p5.2c	4.8	3.8	4.7
6	3.6	3.4	3.2	2.7	2.2	1.9	2.5	4.9	5.8	p6.4c	...c	...c	...c	...c	...c	...c	p7.9c	p7.0c	p6.4c	p6.2c	p6.3c	p5.9c	6.3	4.3	...
7	3.8	3.3	3.4	3.1	3.0	2.8	2.3	4.9	5.5	5.8	p6.0c	p6.3c	p6.6c	p6.6c	p6.6c	6.5	6.3	6.4	6.2	5.4	4.8	p4.8f	4.4	4.4	5.0
8	4.0	4.4	4.3	4.7	3.2	3.2	2.7	5.7	7.0	7.8	7.3	6.5	7.0	7.0	6.8	7.1	6.6	6.5	6.4	5.4	5.0	4.8	5.0	4.8	5.6
9	4.2	3.7	3.3	2.9	2.5	2.4	2.8	5.5	6.9	6.9	6.8	7.1	6.6	6.8	7.0	7.5	7.0	6.2	5.9	5.5	5.5	5.8	6.3	5.1	5.4
10	4.8	3.9	3.3	2.8	2.5	2.4	2.5	4.5	5.7	6.3	6.4	6.3	6.2	6.0	6.6	7.4	6.6	6.6	6.2	5.3	4.9	4.9	5.3	4.5	5.1
11	3.7	4.2	3.6	p4.1f	p3.3f	p4.1f	2.7	5.6	6.9	6.9	6.2	7.1	7.8	8.3	7.3	6.5	6.8	7.2	7.1	6.4	6.1	5.4	4.9	4.6	5.7
12	p5.0f	p5.0f	5.8	5.1	4.4	2.8	2.8	5.1	6.7	7.8	8.1	7.5	7.2	7.0	6.7	8.0	p6.9c	8.4	8.4	7.1	6.7	6.7	6.1	5.7	6.4
13	5.2	5.3	5.3	p5.1f	p4.9f	p3.5f	2.2	4.6	5.4	5.9	6.1	6.6	6.5	6.3	7.1	7.1	7.0	6.9	6.4	5.8	5.8	6.2	6.4	6.1	5.7
14	5.8	5.4	5.5	4.6	4.5	3.1	3.0	5.0	6.5	6.7	6.2	6.4	6.2	7.0	6.7	6.9	6.7	6.1	6.5	6.4	5.9	5.9	5.5	5.0	5.7
15	5.2	5.4	6.1	5.4	p4.1	2.8	2.4	5.5	6.3	6.5	6.3	6.1	6.1	6.1	6.8	6.3	6.4	6.7	8.0	7.4	5.5	6.4	7.0	5.1	5.8
16	p4.7	4.5	3.9	3.3	3.0	2.8	2.8	5.2	6.6	6.0	5.3	5.6	6.7	6.6	6.3	6.8	7.3	7.6	7.1	6.3	6.4	5.6	5.7	6.5	5.5
17	5.3	4.3	4.2	4.0	p3.3f	2.6	p2.7	5.0	6.0	6.4	p6.4c	6.8	6.5	6.2	6.6	6.9	7.3	7.8	7.8	6.4	6.7	6.6	5.4	6.3	5.7
18	6.6	5.8	5.4	5.4	p4.1f	2.8	2.7	5.1	p5.2	6.0	6.2	6.6	6.6	6.4	7.3	7.2	7.7	7.0	6.3	5.5	4.7	4.8	4.5	4.5	5.6
19	4.5	5.0	4.6	4.2	3.2	2.3	2.8	5.4	5.9	6.5	6.6	6.8	6.2	6.5	7.3	7.1	6.5	6.0	6.7	6.0	5.5	5.0	5.0	4.8	5.4
20	4.3	3.6	3.6	2.9	2.6	2.8	2.3	4.9	5.5	6.0	p6.0c	p6.0c	6.0	6.3	6.7	6.5	p7.0	7.0	6.8	5.8	5.3	p5.2f	p5.0f	5.0	5.1
21	4.8	4.5	4.7	4.5	4.3	p2.8c	2.7	5.0	5.9	5.8	5.9	6.3	6.4	6.6	p6.7c	7.0	7.0	7.2	7.5	6.9	6.7	6.4	5.0	4.8	5.6
22	5.5	4.8	4.7	4.3	3.1	2.6	2.9	5.0	6.6	6.9	6.3	p6.3c	6.3	6.5	6.7	7.3	7.2	6.6	7.3	6.4	6.6	7.0	6.5	4.5	5.7
23	3.3	3.3	2.6	2.5	2.1	p1.9	2.6	5.3	6.4	7.7	6.9	p6.6	p5.9	p6.3	p6.4	p7.0	p6.6	p6.6	p5.9	p6.3	p5.9	5.7	5.1	4.7	5.2
24	5.3	4.6	p4.2f	3.9	2.5	2.0	2.6	5.2	6.2	7.0	p6.9c	6.8	...c	...c	...c	...c	...c	7.2	6.8	5.9	5.4	5.1	4.8	4.4	...
25	4.5	4.7	4.5	p4.0f	4.0	2.6	2.3	4.8	5.6	7.0	6.4	5.9	6.1	6.0	6.0	6.5	6.2	6.8	6.7	5.2	p5.6f	5.2	4.9	4.8	5.3
26	5.0	4.6	4.2	4.0	3.6	2.8	2.2	4.6	5.7	6.2	6.4	5.8	5.6	7.3	6.8	6.8	6.7	6.7	7.4	6.4	6.2	p6.2c	6.2	5.1	5.5
27	4.5	p4.4f	p3.9f	3.6	2.7	3.3	3.8	4.8	5.8	p6.1c	6.4	5.4	5.9	7.1	6.7	6.8	7.7	8.8	7.4	7.0	6.8	6.7	7.0	5.0	5.7
28	5.0	5.3	4.4	3.7	2.7	2.5	2.7	4.4	5.3	5.6	5.4	5.4	5.0	6.0	6.6	6.8	7.0	7.4	7.3	6.7	6.8	7.0	5.3	3.7	5.3
29	2.9	2.9	2.6	2.2	1.9	1.8	2.4	4.7	5.6	5.8	5.5	5.5	5.3	5.5	5.5	6.2	6.8	6.4	7.1	p6.7c	6.3	6.8	5.9	5.5	4.9
30	4.8	4.7	4.0	3.5	2.4	1.6	2.8	5.6	6.3	6.5	5.6	p5.4c	5.3	5.3	p5.8c	p6.4c	7.0	7.3	7.0	7.1	6.1	5.9	4.2	3.3	5.2
31	3.0	2.8	2.4	2.1	2.1	2.0	2.6	5.0	5.8	p5.8c	5.8	p5.6c	5.5	p5.6	p5.8c	p6.0c	p6.2c	5.8	5.6	5.5	5.5	5.3	4.9	5.3	4.7
MEAN*	4.4	4.2	4.0	3.7	3.1	2.6	2.7	5.0	6.0	6.4	6.2	6.2	6.2	6.3	6.5	6.8	6.8	6.9	6.8	6.2	5.8	5.8	5.4	4.8	5.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 220

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1942 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JULY 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	240	270	290	420	360	260	230	310	310	340	380	400	400	350	310	330	220	240	230	220	220	200	220	290
2	220	230	240	280	320	260	240	230	340	330	390	380	400	460	420	400	330	220	260	270	270	270	260	240	302
3	230	240	240	240	240	240	250	240	330	q340c	350	430	380	460	420	320	350	240	240	250	240	220	200	220	288
4	220	220	240	250	250	260	230	230	340	380	410	q410c	400	q400c	q400c	390	330	250	240	240	230	230	220	230	292
5	230	210	240	290	290	230	250	230	260	330	330	410	q420c	q420c	430	340	300	230	260	280	280	220	220	230	289
6	220	230	220	270	350	240	250	320	350	q350c	q380c	430	330	320	370	350	240	270	270	240	220	210	210	210	285
7	220	220	220	240	240	260	270	240	330	340	q360c	q390c	q340c	q320c	300	340	350	230	280	340	340	320	260	230	291
8	240	230	260	240	260	230	280	270	320	330	360	380	360	370	300	310	350	240	270	320	320	300	260	240	293
9	230	230	230	230	250	290	270	240	300	330	330	320	420	410	360	340	290	220	260	270	260	240	220	230	282
10	220	240	230	250	280	280	340	240	330	360	380	370	390	440	380	350	290	320	270	310	360	280	240	220	307
11	240	220	250	240	310	310	280	240	330	360	q370c	340	360	380	330	360	340	240	260	250	270	280	270	270	296
12	260	250	230	230	230	220	260	230	260	300	340	380	440	330	340	340	270	230	250	260	280	250	230	230	277
13	250	250	280	250	280	270	270	240	360	340	360	410	380	350	360	360	320	230	270	260	300	250	260	250	298
14	230	270	290	270	290	280	310	250	320	360	380	410	410	400	350	360	320	230	250	260	260	230	250	250	301
15	230	220	230	240	270	310	270	240	320	350	390	410	430	330	340	390	330	240	250	260	270	250	220	240	293
16	240	280	310	300	280	260	270	240	330	380	370	440	380	350	450	370	330	240	270	260	300	270	250	240	309
17	240	270	290	280	300	310	280	240	330	350	q370c	370	430	370	370	380	300	250	260	330	320	290	260	240	310
18	220	250	270	270	240	260	270	230	400	370	400	440	410	350	360	360	330	250	270	300	300	290	280	240	307
19	240	230	230	230	230	230	250	220	280	330	350	370	410	360	340	310	350	240	270	280	250	240	210	230	278
20	230	240	220	240	290	280	260	230	310	380	q390c	q400c	460	420	360	400	340	240	280	300	340	290	280	230	309
21	240	270	270	260	270	270	270	240	300	370	410	400	390	400	q370c	370	330	240	260	270	270	260	240	240	300
22	210	220	230	220	240	230	270	240	230	350	400	q390c	380	370	q380c	380	300	240	260	270	270	220	200	220	280
23	220	210	230	240	270	320	260	240	300	310	340	350	490	400	380	340	340	220	250	290	270	240	240	240	291
24	210	240	220	220	240	250	270	210	300	330	q330c	410	...c	...c	...c	...c	...c	230	270	300	310	320	240	230	...
25	220	230	250	240	280	290	270	240	330	370	320	500	440	400	480	380	340	250	280	310	250	250	240	240	308
26	240	230	240	250	260	280	270	230	320	330	380	430	390	320	380	370	350	200	220	250	240	220	240	250	287
27	270	260	220	250	250	240	270	230	320	q380c	430	390	480	380	320	320	230	280	240	280	250	240	230	240	292
28	230	220	250	280	300	300	270	230	330	420	390	410	450	410	370	380	320	230	250	250	250	200	210	230	299
29	230	230	240	250	260	310	270	240	340	430	470	470	480	430	420	370	360	230	260	250	230	240	240	240	312
30	220	220	230	240	240	240	260	240	320	400	410	q460c	510	410	q400c	q360c	320	230	250	240	210	220	200	210	293
31	210	230	250	260	280	250	260	230	300	350	400	q420c	430	400	q380c	q360c	340	210	250	300	300	250	220	230	296
* MEAN	230	237	246	253	275	270	268	239	318	354	375	403	413	385	374	357	321	239	258	275	274	252	235	234	295

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 221

JULY 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1942

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.2	4.4	4.3	4.4	4.2	4.3	4.2	4.1	4.3	...	...
2	...	...	4.2	4.4	4.4	4.4	4.3	4.3	4.2	4.1	4.2	...	...
3	...	...	4.2	p4.3c	4.5	4.2	4.3	4.3	4.2	4.2	4.3	...	...
4	...	...	4.0	4.1	4.4	p4.4c	4.4	4.3	p4.3	4.3	4.3	...	...
5	...	...	4.1	4.3	4.3	4.4	4.4	4.3	4.3	4.2	4.0	...	...
6	...	...	4.0	4.2	p4.3c	4.5	4.6	4.4	4.2	4.3	4.1	...	...
7	...	...	4.2	4.3	p4.4c	p4.5c	p4.4c	p4.4c	4.5	4.1	4.4	...	...
8	...	...	4.5	4.5	4.4	4.5	4.5	4.4	4.4	4.2	4.4	...	...
9	...	...	4.4	4.3	4.3	4.4	4.6	4.4	4.3	4.4	4.3	...	...
10	...	...	4.2	4.3	4.3	4.4	4.4	4.5	4.3	4.1	4.1	...	...
11	...	...	4.4	4.4	4.6	4.4	4.6	4.5	4.3	4.2	4.3	...	...
12	...	...	4.2	4.5	4.5	4.6	4.7	4.4	4.4	4.4	4.1	...	...
13	...	...	4.4	4.3	4.4	4.5	4.4	4.4	4.4	4.6	4.2	...	...
14	...	...	4.3	4.5	4.4	4.4	4.4	4.4	4.3	4.2	4.2	...	...
15	...	...	4.2	4.3	4.3	4.5	4.4	4.4	4.3	4.4	4.1	...	...
16	...	...	4.3	4.3	4.2	4.4	4.5	4.4	4.8	4.4	4.4	...	...
17	...	...	4.2	4.2	p4.3c	4.5	4.6	4.3	4.5	4.5	4.1	...	...
18	...	...	4.0	4.0	4.3	4.5	4.5	4.3	4.3	4.4	4.0	...	...
19	...	...	4.1	4.5	4.4	4.4	4.6	4.4	4.2	4.4	4.3	...	...
20	...	...	4.3	4.3	p4.4c	p4.4c	4.4	4.4	4.3	4.5	4.3	...	...
21	...	...	4.5	4.3	4.4	4.4	4.4	4.4	p4.3c	4.3	4.2	...	...
22	...	...	4.1	4.4	4.5	p4.4c	4.4	4.3	p4.3c	4.5	4.2	...	...
23	...	...	4.1	4.3	4.3	4.4	4.4	4.3	4.3	4.1	4.1	...	...
24	...	...	4.3	4.3	p4.3c	4.5	...c	...c	...c	...c	...c	...	...
25	...	...	4.1	4.1	4.2	4.5	4.3	4.2	4.3	4.2	4.1	...	...
26	...	...	4.0	4.1	4.4	4.3	4.4	4.3	4.3	4.3	4.1	...	...
27	...	...	4.2	p4.3c	4.6	4.3	4.4	4.3	4.2	4.2	4.2	...	...
28	...	...	4.0	4.3	4.3	4.4	4.4	4.4	4.2	4.2	4.3	...	...
29	...	...	4.1	4.2	4.4	4.4	4.4	4.4	4.4	4.3	4.2	...	...
30	...	...	4.2	4.3	4.3	p4.4c	4.4	4.3	p4.4c	p4.4c	4.4	...	...
31	...	...	3.9	4.3	4.3	p4.4c	4.5	4.4	p4.4c	p4.3c	4.1	...	...
* MEAN	...	...	4.2	4.3	4.4	4.4	4.4	4.4	4.3	4.3	4.2	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	210	210	210	200	200	180	190	190	220	...	...
2	...	...	210	200	200	200	200	200	200	200	200	...	...
3	...	...	210	p200c	190	200	210	200	200	190	190	...	...
4	...	...	210	200	200	190	200	210	180	210	210	...	...
5	...	...	210	210	200	190	200	190	200	190	200	...	...
6	...	...	230	210	p200b	200	200	200	190	190	200	...	...
7	...	...	220	210	p210c	p210c	p200c	p200c	200	190	210	...	...
8	...	...	240	220	220	210	200	200	200	210	210	...	...
9	...	...	220	190	190	200	200	200	190	190	210	...	...
10	...	...	220	200	200	200	200	190	200	200	200	...	...
11	...	...	200	210	200	210	210	200	200	200	210	...	...
12	...	...	220	200	200	200	200	200	190	200	210	...	...
13	...	...	220	200	200	200	190	200	190	200	220	...	...
14	...	...	200	200	200	200	190	200	200	200	200	...	...
15	...	...	220	220	220	200	210	200	210	200	230	...	...
16	...	...	220	200	210	210	200	190	200	220	220	...	...
17	...	...	210	200	p200c	190	210	210	190	230	200	...	...
18	...	...	210	210	200	190	190	190	220	210	200	...	...
19	...	...	220	210	200	210	210	200	210	200	190	...	...
20	...	...	220	190	p200c	p210c	210	200	p200c	190	230	...	...
21	...	...	220	190	200	200	210	220	p200c	190	210	...	...
22	...	...	220	210	210	p200c	200	200	p200c	190	200	...	...
23	...	...	220	200	200	190	200	200	200	200	200	...	...
24	...	...	200	200	p200c	210	...c	...c	...c	...c	...c	...	...
25	...	...	210	200	200	210	190	200	200	200	200	...	...
26	...	...	210	190	210	220	210	180	180	200	200	...	...
27	...	...	220	p200c	210	210	200	200	200	180	200	...	...
28	...	...	200	190	200	190	190	200	200	190	220	...	...
29	...	...	200	200	200	190	190	190	190	180	200	...	...
30	...	...	210	220	200	p190c	180	190	p190c	p200c	210	...	...
31	...	...	210	200	200	p200c	200	200	p200c	p200c	210	...	...
* MEAN	...	...	214	203	203	201	200	198	197	198	207	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 222

JULY 1942 | JULY 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.1	1.2	1.2	1.3	1.9	1.3	1.5	1.4	1.1	1.0	1.0	0.8
2	0.8	0.6	1.0	1.1	1.7	1.7	1.7	1.4	1.3	1.0	1.1	0.9	0.7
3	0.8	1.1	1.1	p1.1c	1.4	1.5	1.7	1.7	1.7	1.2	1.1	1.1	1.0
4	0.8	0.8	1.0	1.0	2.0	2.6	2.7	2.1	2.2	1.0	1.0	0.9	0.8
5	0.9	0.9	1.0	1.2	1.7	1.7	1.7	1.2	1.7	1.0	1.0	0.8	0.7
6	0.8	1.0	1.0	1.8	p1.6c	1.2	1.8	2.1	1.4	1.2	1.2	1.1	0.8
7	0.6	0.6	1.2	1.2	p1.6c	p1.8c	p1.8c	p1.6c	1.4	1.3	1.2	0.7	0.6
8	0.8	1.5	1.9	1.4	1.5	2.0	2.0	1.4	1.4	1.2	1.2	0.8	0.8
9	0.8	1.2	1.2	1.2	1.4	1.4	1.4	1.4	1.4	1.3	1.2	0.8	0.8
10	0.8	0.6	1.2	1.3	1.8	1.4	1.8	2.1	1.4	1.3	1.2	1.2	0.9
11	0.8	1.2	1.2	1.3	1.4	2.1	2.0	1.4	1.4	1.2	1.2	1.2	0.7
12	0.8	1.2	1.2	1.4	1.4	1.4	1.4	1.5	1.7	2.2	1.9	1.2	1.2
13	0.8	1.2	1.2	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.2	1.2	0.7
14	0.8	1.2	1.2	1.2	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.2	0.9
15	0.8	1.2	1.2	1.3	1.4	2.1	2.0	1.9	2.0	1.4	1.2	1.2	1.2
16	0.7	1.4	1.4	1.6	1.2	2.1	2.1	2.0	1.9	1.3	1.2	1.2	0.9
17	0.7	1.6	1.4	1.4	p1.4c	2.1	2.2	2.2	2.1	1.4	1.2	1.2	0.8
18	0.7	1.2	p1.2	1.2	1.4	2.0	2.2	2.2	1.8	2.1	1.2	1.2	0.9
19	1.0	1.5	1.3	1.4	2.0	2.1	2.0	2.2	1.5	1.3	1.2	1.2	0.9
20	0.8	1.2	1.3	1.4	p2.0c	p2.1c	2.2	2.2	2.1	2.0	1.3	1.2	1.0
21	1.1	1.2	1.4	2.1	2.1	2.2	2.2	2.1	p2.0c	1.2	1.3	1.2	1.0
22	0.8	1.1	1.2	1.4	2.0	p2.2c	2.2	2.2	2.0	2.0	1.2	1.1	1.0
23	0.9	1.2	1.2	1.2	1.4	2.2	1.7	1.4	1.4	1.4	1.1	1.0	0.8
24	0.8	1.0	1.0	1.4	p1.4c	2.2	...c	...c	...c	...c	...c	1.0	0.8
25	0.8	0.8	1.0	1.0	1.2	1.4	1.4	1.4	1.4	1.1	1.1	1.0	0.8
26	0.9	0.9	0.9	1.0	1.1	1.1	1.4	1.2	1.2	1.0	1.0	1.0	1.0
27	0.8	0.9	0.9	p1.0c	0.6	1.2	1.8	1.2	1.2	1.1	1.0	0.9	0.8
28	0.8	0.8	0.9	1.2	1.1	1.4	1.3	1.4	1.3	1.2	1.1	1.0	0.9
29	1.0	0.6	0.7	1.4	0.9	0.9	0.9	1.0	1.2	0.9	0.9	0.9	0.8
30	0.8	0.6	0.6	1.0	2.0	p1.6c	1.2	1.9	p1.7c	p1.5c	1.3	0.8	1.0
31	0.6	0.6	0.8	p1.0	1.0	p1.6c	2.2	2.0	p1.8c	p1.6c	1.4	0.6	0.6
MEAN*	0.8	1.0	1.1	1.3	1.5	1.7	1.8	1.7	1.6	1.4	1.2	1.0	0.9

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	2.2	2.8	3.2	3.1	3.4	3.3	3.4	3.0	2.8	2.6	1.7	0.8
2	0.8	2.1	2.4	3.0	3.4	3.4	3.5	3.4	3.2	3.0	2.4	2.0	0.7
3	0.8	2.2	2.5	p3.0c	3.0	3.5	3.6	3.4	3.1	2.9	2.6	2.0	1.9
4	1.0	2.1	2.8	3.5	3.7	3.6	3.6	3.7	3.6	3.5	3.7	1.9	0.8
5	1.0	2.1	2.7	3.4	3.5	3.4	3.6	3.4	3.5	2.6	2.6	1.0	1.1
6	1.0	2.2	2.8	3.1	p3.6c	3.6	3.5	3.4	3.5	3.0	2.7	2.1	0.8
7	1.0	2.2	2.7	3.1	p3.6c	p3.6c	p3.5c	p3.4c	3.2	3.0	2.7	1.9	0.8
8	0.8	2.3	2.7	3.0	3.7	3.6	3.4	3.7	3.2	3.0	2.6	1.4	0.8
9	1.1	2.3	2.7	2.7	3.2	3.3	3.5	3.4	3.2	3.0	2.7	2.0	0.8
10	0.8	2.0	2.3	3.0	3.6	3.5	3.5	3.7	3.2	3.0	2.5	2.0	0.9
11	0.8	2.0	2.5	2.9	3.2	3.7	3.8	3.2	2.9	2.8	2.6	2.0	0.7
12	0.8	2.2	2.6	3.0	3.2	3.3	3.5	3.2	3.2	2.9	2.6	1.9	1.5
13	1.0	2.0	2.5	3.0	3.5	3.5	3.7	3.6	3.2	3.0	2.6	2.1	1.5
14	0.8	1.9	2.6	2.8	2.9	3.6	3.2	3.5	3.2	2.9	2.6	2.0	0.9
15	1.0	2.1	2.6	2.8	3.2	3.8	3.9	3.8	3.6	2.9	2.7	2.0	1.6
16	0.7	2.2	2.6	3.0	3.3	3.8	3.7	3.7	3.7	2.9	2.6	2.0	1.0
17	0.7	2.2	2.6	3.0	p3.3c	3.4	4.0	4.0	3.5	3.8	2.6	2.1	1.2
18	0.7	2.1	2.5	2.7	3.8	3.7	3.7	3.7	3.6	3.2	2.6	2.1	1.7
19	1.0	2.3	2.8	3.5	3.7	3.9	4.0	3.9	3.6	3.0	2.6	2.0	0.9
20	0.8	2.2	2.7	3.0	p3.7c	p3.8c	3.8	3.7	p3.6c	3.0	2.5	2.0	1.0
21	1.1	2.2	2.7	3.0	3.8	3.8	3.5	3.4	p3.1c	2.9	2.7	2.0	1.0
22	1.0	2.2	2.7	3.0	3.7	p3.8c	3.8	2.7	p3.0c	3.0	2.6	3.0	1.0
23	1.0	2.2	2.7	3.1	3.7	3.8	3.7	3.7	3.4	2.8	2.5	2.1	1.1
24	1.3	2.1	2.6	2.9	p3.4c	3.8	...c	...c	...c	...c	...c	2.0	0.9
25	0.8	2.1	2.5	2.9	3.2	3.4	3.5	3.5	3.5	2.7	2.4	2.2	1.0
26	1.0	2.1	2.6	2.7	3.5	3.5	3.6	3.5	3.4	2.7	2.5	1.7	1.5
27	0.8	2.1	2.7	p3.0c	3.5	3.7	3.6	3.4	3.4	2.9	2.7	1.6	0.8
28	0.8	2.2	2.7	3.0	3.6	3.6	3.5	3.7	3.5	2.9	2.7	2.0	1.0
29	1.0	2.1	2.6	3.0	3.6	3.6	3.8	3.8	3.7	2.7	2.7	2.0	1.0
30	1.0	2.3	2.8	3.1	3.6	p3.6c	3.6	3.9	p3.5c	p3.0c	2.9	2.4	1.0
31	1.1	2.2	2.7	3.1	3.6	p3.6c	3.6	3.0	p3.0c	p2.7c	2.5	1.6	1.4
MEAN*	0.9	2.2	2.6	3.0	3.5	3.6	3.6	3.5	3.4	2.9	2.6	2.0	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 223

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1942 — AUGUST 1942

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	4.5	3.8	3.4	2.9	2.0	1.3	2.8	5.9	6.1	p6.3	6.6	6.7	5.8	6.1	p5.7	5.9	5.8	5.6	5.9	6.2	5.9	5.8	4.4	2.5	4.9
2	p3.0b	2.8	2.3	1.8	1.5	p1.1b	2.8	5.1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	5.4	5.3	4.9	...
3	3.9	3.8	3.4	3.0	2.6	1.5	2.7	5.4	6.2	p6.6c	p7.1c	6.2	5.8	5.8	5.6	5.7	7.0	6.9	6.9	6.8	5.7	5.9	5.5	4.5	5.2
4	3.4	3.8	4.0	3.0	2.4	2.4	2.5	5.1	6.4	6.6	5.9	6.3	5.4	5.4	6.4	6.0	6.9	6.6	6.2	5.9	6.3	6.6	5.7	3.7	5.1
5	3.7	3.4	3.7	3.5	3.3	2.7	3.0	5.1	6.2	p6.6	6.2	6.1	5.7	5.8	6.3	6.8	6.7	6.5	6.2	6.1	5.3	5.4	5.2	4.9	5.2
6	5.3	4.9	4.8	4.5	2.9	2.7	2.3	4.6	5.3	6.1	6.6	6.2	6.8	6.6	6.8	6.8	6.9	7.0	7.2	7.2	6.6	7.3	7.3	5.1	5.7
7	4.3	3.9	2.5	2.0	2.3	p1.8a	2.7	5.4	6.3	6.2	6.4	5.4	6.2	6.6	7.0	7.4	8.0	7.9	7.6	7.0	6.3	5.8	6.4	5.0	5.4
8	4.8	4.8	4.0	3.8	2.8	2.4	2.8	5.0	6.8	p7.3	6.8	6.5	6.8	6.6	6.3	6.2	6.8	6.5	6.2	6.2	6.2	6.5	6.8	5.3	5.6
9	4.6	4.3	4.9	4.1	2.7	1.7	2.3	5.5	6.3	6.4	6.6	7.2	6.2	6.7	6.6	6.7	7.0	7.0	7.9	6.9	5.9	4.8	4.6	3.3	5.4
10	3.2	3.4	3.1	2.5	2.5	2.2	2.5	5.0	5.6	6.7	6.8	6.2	6.7	6.3	6.6	6.6	7.2	7.2	7.4	7.0	6.6	6.6	6.0	5.0	5.4
11	4.4	4.9	4.6	4.2	3.8	3.3	2.6	5.2	6.3	6.5	6.4	6.8	6.6	7.0	7.3	7.8	7.9	7.7	7.3	7.2	6.6	6.8	6.8	5.7	6.0
12	6.2	6.9	5.8	5.9	3.9	3.1	2.5	5.1	5.8	5.9	6.2	6.3	6.3	6.1	6.4	6.2	6.4	6.8	7.1	7.0	7.0	6.5	6.5	6.2	5.9
13	5.2	4.4	4.0	3.6	2.8	2.3	2.5	4.9	6.3	6.4	5.9	5.9	5.9	5.9	6.3	6.3	6.2	6.2	6.2	5.6	6.1	5.8	5.8	5.4	5.2
14	4.2	3.0	1.9	1.3	p1.8b	p2.3b	2.8	5.5	6.3	6.8	6.4	5.9	5.9	6.2	6.9	6.0	5.7	6.5	6.5	5.8	5.8	5.6	5.6	p4.6f	5.0
15	4.9	5.4	4.1	3.7	3.6	3.2	3.4	5.2	5.9	6.2	5.9	5.5	5.5	5.9	5.8	5.6	5.8	6.2	6.4	6.9	6.0	5.6	5.5	5.3	5.3
16	p5.4f	5.5	4.9	4.8	4.6	3.5	2.8	5.0	6.3	6.7	7.2	7.3	7.6	7.7	8.2	7.2	6.4	6.3	6.7	6.6	5.6	5.3	6.0	5.8	6.0
17	6.7	7.0	6.0	5.9	5.1	4.4	2.7	5.3	6.4	7.7	8.2	8.1	7.5	7.0	7.1	7.0	6.8	6.7	7.2	7.0	7.0	7.4	6.5	6.4	6.5
18	6.5	6.9	4.9	3.6	3.2	2.4	3.1	5.5	6.8	7.4	7.2	6.6	6.6	6.1	6.1	6.1	6.3	7.0	7.0	6.6	5.4	5.3	5.4	5.6	5.7
19	5.9	5.5	3.4	2.7	2.1	2.1	2.9	5.7	6.6	7.7	8.0	7.5	7.3	7.1	6.7	6.5	6.8	6.5	6.5	6.0	5.7	6.4	6.6	6.7	5.8
20	5.8	6.0	5.0	4.7	3.8	3.4	2.7	4.8	5.5	p5.8c	6.1	6.1	6.3	6.2	6.0	6.5	6.9	7.4	7.1	6.4	6.5	6.1	6.5	5.9	5.7
21	6.3	6.1	5.1	4.2	3.7	p3.5f	3.2	5.6	7.0	7.9	7.2	7.0	7.2	6.8	6.5	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
22	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.4	7.1	6.8	6.7	6.2	6.1	6.0	6.0	6.2	6.0	5.2	p4.8f	p5.6f	6.4	7.6	...
23	p6.2f	5.3	4.7	4.4	4.2	3.7	2.8	5.4	6.0	7.4	7.0	6.8	6.7	7.3	p8.0	7.2	7.1	6.8	6.3	6.3	...c	...c	...c	...c	...
24	...c	...c	...c	...c	...c	...c	...c	...c	...c	6.7	6.6	6.6	6.8	6.8	7.1	7.2	7.2	7.3	8.0	7.0	6.7	6.8	7.0	6.0	...
25	5.5	5.2	5.9	p5.3f	4.8	4.9	2.9	5.5	6.5	6.6	6.4	6.8	7.3	7.6	7.4	8.0	7.3	6.9	7.0	7.1	7.2	6.1	5.8	6.3	6.3
26	6.1	5.4	5.5	5.4	5.1	3.9	4.0	6.0	7.3	7.3	6.8	6.9	7.7	7.9	8.0	p7.9c	p7.8c	p7.6c	7.5	7.2	6.8	6.8	6.7	6.1	6.6
27	5.8	5.8	5.8	4.6	3.4	2.8	3.2	5.8	6.8	7.2	6.4	6.5	6.6	6.4	6.4	6.5	6.5	6.8	6.9	6.3	5.8	6.2	7.0	6.2	5.9
28	5.6	5.0	4.2	4.1	3.4	2.8	3.3	6.0	7.1	p6.9c	6.7	6.7	6.8	6.5	7.1	p6.8c	6.5	6.8	p6.5c	5.9	p6.3c	6.7	7.0	6.5	5.9
29	6.3	6.7	6.7	5.0	4.0	3.1	4.1	6.3	7.2	7.3	6.7	6.7	6.7	p6.7b	7.1	7.2	6.6	6.1	6.1	5.8	6.0	6.0	6.4	6.0	6.1
30	5.7	5.5	p5.3c	p5.1c	5.0	2.3	4.3	6.2	7.4	7.0	6.6	6.8	6.9	6.8	6.8	6.6	6.8	6.6	6.7	6.5	6.4	6.4	6.6	6.5	6.1
31	6.7	6.7	6.3	5.5	4.4	p4.9f	3.6	6.3	7.9	9.6	8.4	p8.3c	p8.4c	8.4	8.9	8.4	8.8	8.5	8.0	7.8	7.3	6.9	7.3	6.6	7.2
MEAN*	5.2	5.0	4.5	4.0	3.4	2.8	3.0	5.4	6.4	6.9	6.8	6.6	6.6	6.6	6.8	6.7	6.8	6.8	6.8	6.6	6.2	6.2	6.2	5.5	5.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 224

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1942 AUGUST 1942

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	230	220	220	210	260	260	230	240	300	360	420	390	400	330	380	300	240	270	250	230	210	210	230	275
2	q240b	240	240	250	290	q380b	240	230	300	380	380	390	q390c	q380c	q380c	380	340	q310c	280	q260c	q250c	230	240	210	300
3	230	260	240	230	220	250	250	260	310	q340c	360	440	470	460	460	360	340	280	250	250	250	250	250	250	302
4	270	250	260	280	290	290	270	230	330	360	400	430	480	430	410	360	380	240	250	260	240	210	210	230	307
5	230	240	240	230	220	240	260	220	330	360	400	390	430	460	400	400	300	220	250	240	250	240	230	270	294
6	250	260	260	230	230	250	270	250	340	330	370	360	420	390	400	350	330	310	250	250	240	230	200	210	291
7	230	210	230	250	250	q230a	210	230	330	360	380	390	410	380	360	350	310	230	260	250	250	240	220	220	282
8	240	250	260	240	270	270	290	250	340	q370	400	370	400	370	440	440	360	230	270	240	240	220	230	210	300
9	240	240	230	220	230	250	290	300	320	320	340	390	400	390	390	340	300	290	270	240	240	230	210	220	287
10	230	240	260	320	300	360	260	330	320	350	370	370	380	400	410	320	340	250	280	260	240	230	210	240	303
11	240	240	240	270	280	280	250	290	290	330	360	370	370	410	340	320	330	220	260	270	260	240	220	230	288
12	280	240	240	220	240	310	270	240	350	350	360	390	380	380	390	340	340	240	270	270	230	230	220	210	291
13	200	220	230	230	240	270	260	230	300	330	400	380	400	410	430	410	320	220	270	285	250	220	210	210	289
14	210	220	230	230	q230b	q240b	250	230	330	320	370	440	450	410	340	350	330	240	270	280	300	230	190	250	289
15	210	210	230	220	230	240	250	230	350	350	400	470	500	440	400	370	340	230	270	240	270	270	280	240	302
16	240	230	270	270	280	310	270	240	350	340	330	350	340	410	320	400	330	240	270	320	350	290	230	240	301
17	230	240	220	230	250	290	270	230	290	320	320	370	370	370	350	360	350	230	260	270	270	240	230	220	282
18	230	210	220	250	240	260	260	290	320	350	400	400	390	430	430	370	330	250	260	340	350	270	210	220	303
19	220	210	220	230	260	330	260	280	310	320	350	370	400	380	390	380	340	240	240	280	250	220	260	220	290
20	240	220	230	240	270	280	260	230	340	q370c	400	420	450	410	360	360	350	230	280	300	290	250	230	240	302
21	240	230	230	240	300	400	260	270	300	320	340	390	360	380	360	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
22	...c	...c	...c	...c	...c	...c	...c	...c	...c	340	360	380	380	410	430	380	430	230	260	310	300	270	250	220	...
23	240	220	220	250	250	310	260	210	330	320	360	400	370	400	400	340	320	240	280	260	...c	...c	...c	...c	...
24	...c	...c	...c	...c	...c	...c	...c	...c	...c	370	370	400	390	410	380	330	280	300	270	270	310	250	220	220	...
25	230	240	300	270	260	280	250	280	320	350	380	390	380	360	360	380	340	250	250	240	240	240	230	215	293
26	220	240	255	230	220	250	250	280	310	350	350	370	370	380	380	q340c	q290c	250	250	270	280	260	240	230	286
27	230	230	220	220	230	240	280	240	330	350	390	440	410	400	400	350	350	240	290	310	300	220	200	220	295
28	220	240	220	220	230	270	250	230	310	q340c	360	410	410	400	420	q370c	320	320	q320c	330	q290c	250	240	220	300
29	220	230	220	220	220	240	250	270	300	360	380	390	400	400	400	390	320	230	270	280	260	250	240	230	290
30	230	220	q220c	q230c	230	240	250	300	310	350	370	400	430	380	400	350	340	230	250	250	260	250	220	240	290
31	230	240	250	240	290	300	260	290	300	310	320	340	q350c	360	330	340	330	230	270	240	250	250	230	230	282
MEAN*	233	233	238	241	250	280	259	255	317	342	369	394	402	400	387	364	333	249	266	270	267	241	226	227	293

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 225

AUGUST 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1942

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.2	4.1	4.4	4.4	4.3	4.3	4.2	4.2	4.1	...	...
2	...	...	4.0	4.2	4.2	4.3	4.3	4.4	4.3	4.1	3.9	...	...
3	...	4.0	4.1	p4.2c	4.4	4.5	4.4	4.1	4.4	4.3	4.3	3.9	...
4	...	...	4.1	4.2	4.5	4.4	4.5	4.3	4.3	4.2	4.2	...	...
5	...	...	4.0	4.2	4.3	4.3	4.4	4.3	4.2	4.1	4.0	...	...
6	...	...	4.1	4.2	4.3	4.3	4.5	4.4	4.4	4.2	4.0	4.0	...
7	...	...	4.3	4.5	4.3	4.3	4.3	4.4	4.3	4.3	4.2	...	...
8	...	...	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.4	4.1	...	...
9	...	3.8	4.0	4.3	4.3	4.3	4.4	4.3	4.3	4.2	4.3	4.2	...
10	...	3.8	4.1	4.3	4.4	4.4	4.3	4.3	4.4	4.3	4.2	...	...
11	...	4.0	4.1	4.3	4.3	4.4	4.3	4.4	4.3	4.0	4.2	...	...
12	...	...	4.4	4.2	4.3	4.4	4.3	4.3	4.2	4.1	4.2	...	...
13	...	...	4.2	4.2	4.4	4.3	4.3	4.3	4.2	4.2	4.1	...	...
14	...	...	4.2	4.2	4.3	4.5	4.3	4.3	4.2	4.2	4.0	...	...
15	...	...	4.3	4.2	4.4	4.3	4.3	4.4	4.2	4.1	4.0	...	...
16	...	...	4.1	4.3	4.3	4.4	4.4	4.5	4.2	4.4	4.1	...	...
17	...	...	4.2	4.2	4.3	4.4	4.3	4.4	4.1	4.2	4.1	...	...
18	...	4.0	4.4	4.4	4.6	4.4	4.5	4.5	4.3	4.3	4.1	...	...
19	...	4.0	4.2	4.2	4.3	4.5	4.3	4.4	4.5	4.3	4.1	...	...
20	...	...	4.3	p4.3c	4.4	4.5	4.4	4.3	4.2	4.2	4.3	...	...
21	...	4.1	4.4	4.4	4.4	4.5	4.5	4.4	4.4	p4.2c	p4.2c	...	...
22	...	...c	p4.4c	4.5	4.3	4.5	4.5	4.3	4.3	4.2	4.5	...	...
23	...	...	4.3	4.4	4.5	4.5	4.5	4.6	4.5	4.2	4.2	...	...
24	...	...c	p4.4c	4.5	4.5	4.5	4.5	4.4	4.3	4.2	4.0	3.9	...
25	...	3.8	4.4	4.4	4.5	4.5	4.5	4.5	4.4	4.4	4.4	...	...
26	...	3.9	4.3	4.5	4.5	4.5	4.5	4.5	4.5	p4.4c	p4.3c	...c	...
27	...	...	4.5	4.5	4.7	4.6	4.5	4.5	4.5	4.4	4.3	...	...
28	...	...	4.5	p4.5c	4.5	4.6	4.5	4.4	4.5	p4.4c	4.2	4.0	...
29	...	4.0	4.4	4.5	4.5	4.5	4.5	p4.5	4.5	4.5	4.2	...	...
30	...	4.1	4.2	4.4	4.5	4.5	4.6	4.5	4.4	4.4	4.1	...	...
31	...	4.1	4.4	4.4	4.5	4.5	p4.6c	4.6	4.4	4.4	4.2	...	...
MEAN*	...	4.0	4.2	4.3	4.4	4.4	4.4	4.4	4.3	4.3	4.2	4.0	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	210	200	200	200	200	180	180	190	210	...	...
2	...	...	210	210	200	200	190	190	190	200	p210c	...	...
3	...	230	220	p210c	200	180	180	190	200	190	200	240	...
4	...	...	210	210	200	190	190	180	200	180	200	...	...
5	...	...	210	210	200	200	200	200	200	190	200	...	...
6	...	...	200	220	200	190	180	200	210	200	200	240	...
7	...	...	220	210	210	200	200	190	200	200	210	...	...
8	...	...	240	220	230	200	200	190	210	210	200	...	...
9	...	240	210	210	200	190	190	190	190	180	230	...a	...
10	...	230	220	220	210	200	200	200	200	190	200	...	...
11	...	230	220	200	200	200	200	200	200	190	210	...	...
12	...	...	220	220	210	200	200	200	210	190	200	...	...
13	...	...	200	190	190	190	180	190	200	200	200	...	...
14	...	...	220	200	210	200	200	190	190	180	185	...	...
15	...	...	190	200	200	190	190	190	190	190	190	...	...
16	...	...	220	210	200	200	200	200	210	200	190	...	...
17	...	...	230	220	220	200	200	210	200	200	190	...	...
18	...	240	230	210	210	200	200	200	200	190	200	...	...
19	...	230	220	220	200	200	200	200	200	180	200	...	...
20	...	...	200	p210c	220	210	210	200	200	200	200	...	...
21	...	230	220	210	210	200	200	190	200	p200c	p200c	...	...
22	...	...c	p220c	210	210	200	200	200	200	200	190	...	...
23	...	...	220	210	200	200	200	210	200	200	200	...	...
24	...	...c	p220c	210	200	200	200	210	190	190	200	240	...
25	...	230	210	200	200	200	210	200	200	200	190	...	...
26	...	240	210	220	210	200	200	200	200	p220c	p210c	...c	...
27	...	...	210	210	200	200	200	200	200	195	190	...	...
28	...	...	220	p210c	200	200	200	200	200	p200c	190	240	...
29	...	230	220	220	210	200	200	p200b	200	200	200	...	...
30	...	240	220	210	200	200	200	200	200	200	200	...	..
31	...	230	210	220	210	210	p200c	200	210	210	200	...	...
MEAN*	...	234	215	211	205	199	198	197	200	195	200	240	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 226

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1942 — AUGUST 1942

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED 'IRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	0.7	1.1	1.2	1.4	1.8	2.5	2.5	1.4	1.2	1.2	0.8	0.8
2	0.6	1.0	1.0	1.0	1.5	1.8	1.7	1.7	1.7	p1.4c	p1.1c	p1.0c	p0.6c
3	0.8	0.8	1.0	p1.4c	1.8	1.8	1.7	1.7	1.7	1.2	1.0	1.1	1.0
4	0.6	1.0	1.2	1.9	1.8	2.0	2.6	1.8	2.4	1.8	1.2	1.0	0.8
5	0.7	0.7	1.0	p1.8	1.7	1.3	1.8	1.4	1.4	1.2	1.0	0.8	0.9
6	0.8	0.8	1.0	1.1	1.2	1.6	1.8	1.4	1.4	1.4	1.2	1.0	0.9
7	0.6	0.8	1.0	1.0	1.4	1.8	1.8	1.8	1.3	1.4	1.2	1.2	1.0
8	0.6	0.8	1.0	1.1	1.4	1.3	1.4	1.4	1.4	1.2	1.0	1.0	0.8
9	0.8	0.8	0.7	1.0	1.0	1.1	1.2	1.1	1.4	1.4	1.4	1.0	0.8
10	0.5	0.8	1.0	1.2	1.2	1.4	1.4	1.4	1.3	1.3	1.2	1.0	0.6
11	0.6	0.9	1.0	1.2	1.3	1.4	1.4	1.4	1.4	1.2	1.1	1.0	0.9
12	0.6	0.8	1.0	1.2	1.4	1.4	1.5	1.4	1.4	1.2	1.0	0.9	1.0
13	0.6	0.8	1.0	1.2	1.4	1.4	1.4	1.4	1.4	1.3	1.0	0.8	0.7
14	0.8	1.1	1.0	1.3	1.4	1.4	1.4	1.4	1.4	1.3	1.1	1.0	0.8
15	0.8	1.0	1.0	1.2	1.2	1.4	1.4	1.4	1.4	1.2	1.2	1.0	0.9
16	0.6	0.8	1.0	1.2	1.4	1.4	1.4	1.4	1.4	1.3	1.1	1.1	1.0
17	0.8	0.8	1.0	1.2	1.8	1.4	1.8	1.4	1.8	1.4	1.1	1.1	1.0
18	0.9	0.8	1.1	1.4	1.3	1.8	1.4	1.4	1.1	1.1	1.1	1.0	0.8
19	0.6	0.8	1.0	1.1	1.4	1.8	1.4	1.4	1.4	1.3	1.1	1.0	0.9
20	0.6	0.8	0.8	p1.0c	1.2	1.2	1.4	1.4	1.2	1.1	1.1	1.0	0.6
21	0.5	0.8	1.0	1.0	1.4	1.8	1.4	1.4	1.3	p1.2c	p1.0c	p0.9c	p0.8c
22	p0.8c	p0.9c	p1.1c	1.4	1.8	1.8	1.8	1.8	1.4	1.2	1.0	0.8	0.9
23	0.5	0.6	1.0	1.2	1.8	1.8	2.0	2.0	1.9	1.8	p1.6c	1.4	1.0
24	p0.7c	p0.8c	p1.1c	1.4	1.8	1.8	1.6	1.4	1.4	1.3	1.1	1.0	0.8
25	0.9	1.0	1.2	1.3	1.8	1.8	1.8	1.9	1.2	1.3	1.2	1.1	0.9
26	0.9	1.0	1.2	1.3	1.4	2.0	2.1	2.0	1.8	p1.4c	p1.2c	1.1	1.0
27	0.8	1.0	1.2	1.4	1.4	1.8	1.8	1.5	1.4	1.4	1.2	1.4	0.8
28	1.0	0.8	1.1	p1.5c	2.0	1.8	2.0	1.8	1.8	p1.4c	1.2	1.1	p0.9c
29	0.9	1.0	1.0	1.8	1.8	1.9	1.9	p1.9b	1.8	1.4	1.2	1.1	1.0
30	0.8	1.0	1.0	1.4	1.8	1.8	1.9	1.3	1.0	1.2	1.1	1.0	0.9
31	0.6	0.8	1.1	1.3	2.2	1.9	p1.9c	1.8	1.8	1.4	1.1	1.0	0.8
MEAN*	0.7	0.9	1.0	1.3	1.5	1.6	1.7	1.6	1.5	1.3	1.1	1.0	0.9

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.1	2.3	2.6	3.0	3.4	3.5	3.5	3.4	3.1	3.0	2.6	2.3	1.1
2	1.0	2.4	p2.6c	p3.0c	p3.4c	p3.5c	p3.4c	p3.4c	p3.2c	p3.0c	...c	...c	0.6
3	0.8	2.4	2.7	p3.1c	3.5	3.4	3.5	3.5	3.4	2.9	2.7	2.1	1.6
4	1.2	2.2	2.7	3.4	3.3	3.4	3.4	3.4	3.4	3.0	3.5	1.8	1.2
5	1.0	2.2	2.8	3.2	3.4	3.5	3.5	3.4	3.4	3.0	2.6	2.3	1.1
6	1.2	2.4	2.8	3.3	3.3	3.4	3.4	3.4	3.3	2.9	2.6	2.0	0.9
7	1.2	2.2	2.5	3.0	3.5	3.5	3.5	3.5	3.4	3.0	2.6	2.1	1.0
8	1.0	2.2	2.8	3.3	3.4	3.4	3.5	3.4	3.4	2.9	2.8	2.2	1.0
9	0.8	0.8	2.2	2.6	3.1	3.3	3.4	3.4	3.4	2.9	2.8	2.5	2.2
10	1.1	2.3	2.9	3.1	3.4	3.4	3.5	3.4	3.4	2.9	2.7	2.2	1.2
11	1.2	2.3	2.5	2.8	3.4	3.4	3.4	3.4	3.4	2.9	2.8	2.1	0.9
12	1.1	2.2	2.4	3.0	3.4	3.5	3.5	3.5	3.4	3.0	2.6	2.2	1.0
13	1.1	2.0	2.4	3.1	3.4	3.5	3.5	3.4	3.4	3.0	2.6	2.3	1.6
14	1.2	2.2	2.5	3.1	3.4	3.4	3.5	3.5	3.4	3.0	2.6	2.3	0.8
15	1.2	2.3	2.6	3.1	3.4	3.4	3.4	3.4	3.4	2.8	2.5	2.4	2.0
16	1.2	2.2	2.9	3.1	3.4	3.7	3.7	3.7	3.4	2.9	2.6	2.2	1.0
17	1.2	2.4	2.8	3.1	3.4	3.5	3.4	3.5	3.4	2.9	2.6	2.3	1.2
18	1.2	2.1	2.7	3.0	3.4	3.5	3.5	3.5	3.4	2.9	2.6	2.2	1.4
19	1.2	2.3	2.8	3.0	3.4	3.4	3.4	3.4	3.4	3.0	2.7	2.4	1.2
20	1.2	2.2	2.7	p3.1c	3.4	3.5	3.5	3.5	3.4	2.9	2.6	2.2	1.1
21	1.2	2.3	2.8	3.4	3.4	3.5	3.5	3.5	3.4	p3.0c	p2.6c	p2.2c	...c
22	p1.2c	p2.3c	p2.7c	3.0	3.4	3.5	3.6	3.6	3.4	3.0	2.7	2.2	0.9
23	1.2	2.4	2.7	3.1	3.5	3.5	3.6	3.6	3.5	2.9	2.6	2.1	1.0
24	p1.2c	p2.4c	p2.8c	3.4	3.5	3.4	3.6	3.4	3.4	3.2	2.6	2.1	0.8
25	1.2	2.3	2.6	3.0	3.4	3.5	3.5	3.5	3.4	3.0	2.7	2.4	0.9
26	1.3	2.4	2.7	3.3	3.5	3.5	3.6	3.6	3.5	p3.1c	p2.7c	2.0	1.1
27	1.2	2.3	2.8	3.4	3.5	3.5	3.6	3.5	3.4	3.2	2.8	2.0	1.0
28	1.4	2.0	2.8	p3.2c	3.4	3.5	3.5	3.5	3.4	p3.1c	2.7	2.2	p1.1c
29	1.5	2.4	2.8	3.3	3.5	3.8	3.7	p3.6c	3.5	3.2	2.8	2.2	1.0
30	1.4	2.3	3.0	3.3	3.4	3.6	3.6	2.4	3.3	3.0	2.7	2.4	0.9
31	1.4	2.3	3.0	3.1	3.6	3.8	p3.6c	3.5	3.4	3.1	2.7	2.1	0.9
MEAN*	1.2	2.2	2.7	3.1	3.4	3.5	3.5	3.4	3.4	3.0	2.6	2.2	1.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 227

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1942 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — SEPTEMBER 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.0	6.9	6.6	5.2	4.1	3.3	3.3	5.8	7.1	6.6	6.9	7.0	7.2	7.6	7.9	7.9	8.0	7.3	7.1	6.5	6.4	6.2	6.1	5.9	6.4
2	6.5	6.5	4.4	3.	3.8	3.1	3.4	5.8	6.8	7.7	8.2	8.1	8.2	8.3	7.8	7.7	7.3	7.2	7.1	8.0	7.6	6.8	7.3	7.5	6.7
3	7.6	7.0	7.2	6.9	5.9	5.0	5.5	6.1	6.[illegible]	6.6	6.4	6.2	6.7	6.6	7.0	6.6	6.7	6.8	6.8	6.1	5.5	5.7	p6.1f	6.5	6.4
4	6.0	6.2	5.3	4.3	3.6	2.8	3.6	6.1	7.3	7.5	6.9	7.0	6.9	6.7	6.8	6.9	7.2	7.7	8.0	7.0	6.5	6.0	6.3	6.6	6.2
5	6.9	6.5	5.3	4.9	3.8	p3.2c	p3.8c	p6.3c	p6.6c	8.6	6.9	6.7	6.9	7.4	7.5	6.8	7.2	7.6	7.0	7.4	6.5	6.7	5.8	5.6	6.5
6	6.7	6.4	6.0	5.2	4.8	4.4	3.7	6.4	7.3	7.0	7.2	7.2	8.4	8.5	8.6	p8.7	p8.7	8.5	9.1	8.4	8.4	8.1	8.4	6.9	7.2
7	6.3	7.2	6.9	6.0	4.4	3.1	4.3	6.4	6.8	6.6	6.9	7.7	8.0	8.0	8.1	8.9	8.0	9.1	8.2	7.3	8.0	8.0	8.2	7.2	7.1
8	6.6	6.6	7.6	6.2	4.7	4.2	3.3	6.2	7.1	7.6	7.5	8.1	7.9	8.7	9.3	9.5	8.9	9.0	9.2	8.4	p7.0f	6.9	7.1	7.7	7.3
9	6.3	5.8	4.6	3.5	2.9	3.0	3.5	5.8	6.2	6.1	5.9	6.2	6.5	6.9	7.6	8.2	8.3	8.3	7.8	6.7	6.6	7.8	7.9	7.8	6.3
10	p6.9f	p6.1f	5.2	3.9	2.7	2.5	4.5	6.8	7.5	7.7	7.1	7.0	7.0	7.1	7.5	7.6	7.6	7.4	7.5	7.0	6.8	7.4	7.4	6.0	6.4
11	6.5	7.2	6.3	5.4	3.9	2.4	4.3	6.2	7.2	7.9	8.3	p8.6c	8.5	8.2	6.4	8.5	9.2	8.5	8.4	8.3	8.2	8.5	8.1	6.8	7.2
12	7.0	p7.1f	6.2	5.2	4.8	3.9	4.8	7.3	7.8	p6.7	8.1	7.2	7.6	8.8	9.2	8.6	9.8	10.5	p8.9c	p8.8c	p8.8c	8.5	8.4	7.1	7.6
13	5.3	4.7	3.6	3.[illegible]	2.3	1.7	4.2	6.5	6.9	6.7	6.7	6.9	7.3	7.6	7.8	8.4	9.0	9.4	9.6	9.7	9.8	8.9	7.7	7.[illegible]	6.7
14	7.0	7.8	6.7	5.9	5.7	5.5	6.2	7.6	8.3	8.2	p7.7c	7.2	p6.9	6.7	7.6	7.8	7.5	8.2	8.9	7.6	7.3	8.0	8.4	7.8	7.4
15	6.7	6.8	6.2	5.2	4.8	p4.5f	4.8	6.9	8.7	6.6	8.1	7.7	7.4	7.5	8.3	8.4	8.7	8.5	8.3	7.6	6.6	6.5	6.7	7.0	7.1
16	6.6	7.5	6.8	6.2	5.3	5.1	5.0	7.3	8.3	8.7	p8.6c	8.4	7.5	p7.6c	7.7	8.3	8.4	7.7	7.8	7.2	7.1	8.3	8.4	7.0	7.4
17	6.0	4.4	4.2	4.0	3.9	3.9	p5.0c	p6.1c	7.3	8.5	9.2	7.3	6.6	6.5	6.8	7.2	7.5	7.1	7.3	7.0	7.2	7.2	6.8	6.5	6.4
18	6.4	6.9	5.6	4.7	3.9	3.7	5.5	7.3	7.7	8.3	p8.5c	8.9	8.1	7.4	7.6	p8.0c	8.6	9.0	9.1	9.2	8.8	8.3	8.4	7.5	7.4
19	7.0	8.5	7.1	5.6	p4.9f	p4.?f	4.5	6.7	8.1	8.4	7.8	7.4	7.1	7.5	7.7	8.1	8.2	7.9	8.0	7.3	6.6	p6.6f	6.2	p6.2f	7.0
20	6.2	5.8	5.5	5.5	4.5	4.4	5.4	7.4	8.5	8.8	8.7	8.7	8.4	8.1	8.2	7.9	7.9	8.4	8.1	7.4	6.9	7.3	p6.8f	p6.8f	7.1
21	p6.7f	7.2	6.8	6.3	4.2	2.8	5.2	7.3	6.9	9.3	9.1	8.5	8.3	8.5	9.2	10.3	10.4	10.3	9.2	7.9	p7.3f	6.7	6.8	6.7	7.7
22	7.4	8.1	6.6	p5.8f	5.2	5.2	4.4	7.0	8.2	7.9	p7.6c	p7.3c	7.0	7.4	8.1	8.4	8.8	8.5	8.4	7.0	p6.7f	6.5	6.8	6.0	7.2
23	7.4	6.0	5.0	3.8	3.3	3.1	5.0	7.1	8.0	8.0	7.5	7.1	7.8	8.4	8.7	9.7	p9.6c	9.4	9.4	8.9	8.7	9.1	9.2	9.0	7.5
24	8.4	6.8	3.4	p1.4b	p1.1b	p1.0b	4.5	7.1	7.6	7.0	6.8	6.8	7.0	7.4	6.4	8.7	8.8	8.7	9.0	8.3	7.4	8.4	8.5	8.4	6.7
25	9.5	7.3	6.5	5.5	3.8	3.3	5.2	7.3	8.4	8.8	7.2	7.0	7.3	7.6	8.0	8.6	9.0	9.2	9.0	8.2	p7.8f	p7.5f	7.1	8.4	7.4
26	8.4	6.8	5.6	4.0	3.0	2.2	4.9	7.0	8.4	8.8	8.2	8.4	9.1	9.6	10.0	10.2	9.7	8.6	8.4	8.0	7.0	7.5	8.4	8.4	7.5
27	8.4	8.3	8.0	8.4	p7.2f	p6.0f	4.9	7.2	4.8	9.1	8.0	7.8	9.0	8.8	9.3	9.3	9.0	9.2	9.6	8.6	8.4	p8.6f	9.2	p7.8f	8.1
28	6.4	6.0	4.2	3.3	2.7	2.2	5.1	7.4	8.8	9.2	7.3	6.8	6.9	7.4	7.7	8.2	8.7	p9.1c	p8.8c	p8.5c	p8.8c	p9.0c	p9.3c	p9.0c	7.1
29	p8.6c	p7.1c	p5.7c	p4.3c	...c	...c	...c	...c	...c	...c	...c	7.3	7.1	7.4	7.4	7.7	8.0	8.2	8.7	8.2	7.7	7.3	6.7	7.1	...
30	6.7	6.3	6.2	4.8	3.9	3.5	5.3	7.3	8.4	9.5	9.2	7.3	7.0	6.8	7.1	p7.4c	7.6	8.0	8.0	p8.1f	p8.3f	p8.4f	p8.5f	7.9	7.1
31																									
*MEAN	7.0	6.7	5.8	4.9	4.1	3.6	4.6	6.8	7.7	8.0	7.7	7.5	7.5	7.7	8.0	8.3	8.4	8.4	8.4	7.8	7.5	7.6	7.6	7.3	7.0

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 228

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1942 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS SEPTEMBER 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	250	230	240	230	230	270	270	230	320	370	400	400	370	350	390	360	310	240	270	270	210	240	240	220	288
2	230	210	220	240	310	320	280	230	350	350	340	350	360	360	380	350	340	240	240	240	240	240	270	250	289
3	240	220	220	220	240	250	250	220	330	370	340	410	400	410	380	350	320	240	270	320	290	270	260	230	294
4	230	230	250	250	260	260	250	280	310	340	360	390	370	420	400	350	300	240	250	300	310	230	210	220	292
5	240	230	250	230	250	q260	q270	q280	q290	340	370	380	400	380	370	330	310	260	240	280	290	300	260	250	294
6	230	240	240	230	250	300	260	240	320	350	330	360	350	340	330	370	300	240	250	240	240	240	240	250	281
7	240	200	240	200	230	240	260	220	300	320	350	380	360	350	340	330	300	240	270	280	270	250	240	240	277
8	240	250	210	230	270	320	260	270	300	320	340	340	350	340	320	310	300	240	260	320	270	250	240	210	282
9	210	220	210	240	250	260	260	220	350	380	420	400	380	360	330	330	320	260	270	290	320	320	290	290	299
10	300	260	230	230	260	250	250	260	300	340	350	400	390	370	380	320	340	240	270	310	320	250	230	240	295
11	250	230	220	240	230	240	250	270	290	320	350	350	370	370	340	340	320	240	280	320	300	230	220	230	283
12	250	230	240	260	240	260	260	270	300	330	360	370	360	320	310	300	320	240	270	270	250	230	210	220	278
13	220	220	250	240	240	260	250	230	320	340	350	370	380	360	350	300	300	240	270	250	230	210	210	220	275
14	220	230	240	260	260	250	240	270	300	320	q340c	370	q380c	380	350	340	300	240	250	310	320	260	220	220	286
15	260	230	270	300	300	280	240	270	300	320	340	350	350	380	350	280	300	250	260	300	320	290	230	260	293
16	260	230	230	250	260	220	280	270	280	310	q350c	390	370	q360c	350	330	320	240	280	330	290	240	210	210	286
17	220	220	240	280	340	290	q280c	q270c	270	300	340	380	390	380	370	330	290	250	270	290	250	240	240	230	290
18	230	200	220	240	270	280	240	260	270	310	q330c	350	360	370	350	q330c	300	240	260	290	230	230	230	240	276
19	220	200	230	270	280	280	250	290	320	330	340	370	350	380	330	330	310	240	260	320	q320f	320	280	250	295
20	230	220	230	240	250	270	250	280	280	340	330	360	370	360	340	320	320	230	270	280	300	270	230	260	285
21	230	220	250	230	250	260	250	270	310	320	340	360	350	330	320	320	290	250	270	350	310	240	250	240	284
22	240	240	230	260	290	270	240	280	310	330	q330c	q340c	350	340	360	310	310	260	270	380	370	220	210	230	290
23	220	210	220	230	250	270	260	280	310	330	330	390	370	340	330	320	310	230	260	270	250	230	230	240	278
24	230	210	210	240	240	280b	240	290	320	360	380	380	400	400	340	320	310	230	260	330	330	240	250	230	292
25	240	230	230	230	230	240	240	280	310	330	370	400	380	360	340	320	310	240	270	340	320	330	280	230	294
26	240	230	210	230	230	260	240	280	300	320	350	360	340	330	330	300	310	240	260	310	300	290	260	260	282
27	250	240	230	270	300	280	240	270	320	320	350	340	370	350	320	290	290	230	250	280	260	230	260	240	282
28	230	220	230	240	250	250	240	280	290	320	360	410	380	360	340	310	300	250	q270c	300	320	q300c	q270c	250	290
29	250	240	250	270	q270c	270	q260c	q290c	q300c	q320c	q340c	360	350	360	360	340	310	250	270	310	300	270	240	260	293
30	260	230	230	220	230	240	240	270	290	330	360	380	400	390	370	q330c	290	230	260	330	330	230	210	210	286
31																									
MEAN*	239	226	232	243	259	266	253	264	305	333	351	373	370	363	349	325	308	242	263	300	289	256	241	238	287

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 229

SEPTEMBER 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1942

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.1	4.4	4.5	4.7	4.5	4.5	4.4	4.5	4.2	4.1	...	...
2	...	...	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.2	4.3	...	...
3	...	...	4.5	4.3	4.5	4.4	4.5	4.5	4.4	4.2	4.3	...	...
4	...	4.2	4.5	4.5	4.5	4.5	4.5	4.6	4.5	4.3	3.9	...	...
5	...	...	4.4	4.5	4.5	4.6	4.5	4.5	4.5	4.4	4.0	...	...
6	...	...	4.3	4.5	4.5	4.6	4.5	4.5	4.4	4.5	4.2	...	...
7	...	...	4.4	4.4	4.5	4.7	4.5	4.5	4.4	4.3	4.2	...	...
8	...	4.1	4.5	4.4	4.5	4.4	4.5	4.5	4.3	4.3	4.3	...	...
9	...	...	4.3	4.4	4.5	4.5	4.5	4.5	4.3	4.3	4.1	...	...
10	...	4.1	4.2	4.4	4.5	4.5	4.4	4.4	4.4	4.2	4.3	...	...
11	...	4.1	4.3	4.4	4.5	4.5	4.6	4.6	4.4	4.2	4.2	...	...
12	...	4.0	4.3	4.4	4.6	4.6	4.6	4.5	4.4	4.1	4.2	...	...
13	...	...	4.4	4.6	4.7	4.7	4.6	4.6	4.5	4.3	4.2	...	...
14	...	4.1	4.4	4.3	p4.5c	4.6	p4.6c	4.5	4.5	4.3	4.1	...	...
15	...	4.2	4.5	4.5	4.5	4.6	4.6	4.7	4.7	4.0	4.2	...	...
16	...	4.2	4.4	4.5	p4.6c	4.7	4.7	p4.6c	4.5	4.3	4.4	...	...
17	...	...	4.3	4.4	4.6	4.7	4.5	4.5	4.5	4.3	3.9	...	...
18	...	4.2	4.4	4.4	p4.5c	4.6	4.6	4.6	4.4	p4.3c	4.3	...	...
19	...	4.2	4.3	4.5	4.5	4.5	4.6	4.5	4.5	4.2	4.3	...	...
20	...	4.3	4.2	4.5	4.5	4.6	4.6	4.5	4.5	4.3	4.2	...	...
21	...	4.3	4.5	4.6	4.6	4.6	4.6	4.5	4.5	4.6	4.2	...	...
22	...	4.0	4.5	4.5	p4.6c	p4.6c	4.5	4.7	4.7	4.5	4.2	...	...
23	...	4.2	4.4	4.5	4.6	4.7	4.6	4.6	4.5	p4.5c	p4.3c	...	...
24	...	4.3	4.5	4.5	4.5	4.6	4.8	4.7	4.5	4.5	4.4	...	...
25	...	4.2	4.5	4.5	4.6	4.7	4.7	4.6	4.4	4.5	4.4	...	...
26	...	4.2	4.5	4.5	4.6	4.6	4.6	4.5	4.4	4.2	4.2	...	...
27	...	4.4	4.5	4.4	4.7	4.6	4.7	4.8	4.5	4.4	4.2	...	...
28	...	4.3	4.4	4.5	4.6	4.8	4.6	4.5	4.5	4.4	4.2	...	...
29	...	p4.3c	p4.4c	p4.5c	p4.6c	4.7	4.7	4.5	4.7	4.7	4.3	...	...
30	...	4.3	4.4	4.6	4.7	4.7	4.7	4.6	4.5	p4.3c	4.1	...	...
31													
MEAN*	...	4.2	4.4	4.5	4.6	4.6	4.6	4.6	4.5	4.3	4.2	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	250	220	205	200	200	200	200	200	210	210	...	...
2	...	...	220	210	210	210	200	200	200	200	200	...	...
3	...	...	200	210	210	200	190	200	200	200	200	...	...
4	...	230	210	210	200	200	200	200	200	190	210	...	...
5	...	...	210	210	210	200	200	200	190	190	200	...	...
6	...	...	220	210	210	200	200	190	220	210	220	...	...
7	...	...	210	200	190	200	200	200	200	200	220	...	...
8	...	240	220	220	210	200	200	200	190	190	190	...	...
9	...	...	220	210	210	200	200	200	200	200	200	...	...
10	...	230	210	200	200	200	190	200	190	200	190	...	...
11	...	220	215	210	200	200	190	190	200	200	200	...	...
12	...	240	220	220	210	210	200	200	200	200	210	...	...
13	...	...	200	210	200	200	200	200	200	200	210	...	...
14	...	230	210	220	p210c	200	p200c	200	200	200	190	...	...
15	...	230	210	210	210	200	200	200	200	200	200	...	...
16	...	240	230	220	p210c	200	200	p200c	200	200	190	...	...
17	...	...	210	210	210	200	200	200	200	190	210	...	...
18	...	230	220	200	p200c	200	200	190	200	p210c	220	...	...
19	...	230	220	210	210	210	200	210	200	200	200	...	...
20	...	240	200	210	200	200	200	200	200	190	190	...	...
21	...	230	220	220	210	200	200	200	200	200	200	...	...
22	...	230	210	200	p200c	p190c	190	200	190	210	210	...	...
23	...	230	210	210	200	200	200	190	190	p210c	230	...	...
24	...	220	220	210	200	200	200	190	200	200	200	...	...
25	...	230	220	220	200	200	200	190	200	190	190	...	...
26	...	230	210	210	200	200	200	200	200	200	190	...	...
27	...	230	230	210	200	200	200	200	200	190	210	...	...
28	...	230	220	210	200	200	200	200	200	200	190	...	...
29	...	p230c	p220c	p210c	p200c	200	190	200	200	190	200	...	...
30	...	230	210	200	205	200	200	200	190	p190c	190	...	...
31													
MEAN*	...	232	215	210	204	201	198	198	199	199	202	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 230

SEPTEMBER 1942 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — SEPTEMBER 1942

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	1.0	1.2	1.4	1.4	1.4	1.4	1.8	1.4	1.4	1.2	1.0	0.8
2	0.8	0.9	1.1	1.4	1.8	1.9	1.8	1.5	1.8	1.3	1.0	0.8	0.8
3	0.8	0.8	1.0	1.4	1.8	1.9	1.8	1.4	1.8	1.3	1.0	1.0	0.9
4	0.8	0.8	1.0	1.4	2.0	1.9	2.0	1.8	1.4	1.4	1.1	1.0	0.7
5	p0.8c	p1.0c	p1.4c	1.8	1.9	1.9	2.0	2.0	1.8	1.8	1.1	1.0	0.7
6	0.8	1.0	1.1	1.4	2.0	2.0	2.1	2.2	1.4	1.8	1.4	1.1	0.8
7	0.8	0.9	1.0	1.7	2.2	1.8	2.2	2.0	1.8	1.7	1.4	1.1	0.8
8	0.8	0.8	1.1	1.3	1.8	1.9	1.9	1.9	1.9	1.8	1.3	1.1	0.8
9	1.1	1.0	1.4	1.8	2.0	1.9	1.9	1.8	1.9	1.4	1.2	1.0	0.8
10	0.8	1.1	1.4	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.1	1.0	0.6
11	1.0	1.2	1.1	1.8	1.8	1.8	1.8	2.1	1.8	1.1	1.1	1.0	0.8
12	0.8	1.1	1.2	1.4	2.1	2.0	1.9	1.8	1.8	1.4	1.1	1.0	0.8
13	0.8	1.0	1.0	1.3	1.8	1.8	1.8	1.9	1.8	1.4	1.2	1.0	0.8
14	0.9	0.9	1.1	1.3	p1.8c	1.8	p2.0c	2.0	1.9	1.8	1.1	1.0	0.8
15	0.8	0.9	1.0	2.2	2.0	1.8	2.0	1.9	1.8	1.3	1.1	1.1	0.9
16	0.5	0.9	1.0	1.8	p1.9c	2.0	2.0	p2.0c	1.9	1.8	1.2	1.1	0.8
17	p0.8c	p1.1c	2.0	1.8	2.0	2.0	1.9	1.9	2.0	1.8	1.4	1.0	0.8
18	0.8	0.8	2.1	1.1	p2.0c	2.0	2.0	2.1	2.0	p1.9c	1.8	1.8	1.0
19	0.8	1.1	1.4	1.8	2.1	2.1	2.1	2.1	2.1	1.7	2.0	1.8	1.0
20	0.8	0.9	1.8	1.4	2.1	2.0	2.2	2.0	1.8	1.8	1.2	1.0	0.8
21	0.3	1.8	1.4	2.0	2.8	2.2	2.2	1.9	1.9	2.4	1.7	1.4	0.8
22	0.8	1.0	1.8	2.2	p2.2c	p2.2c	2.1	2.1	1.8	1.5	1.1	1.0	1.0
23	0.8	1.0	1.8	1.8	1.8	2.2	1.8	1.8	2.0	2.2	2.1	1.7	0.8
24	1.0	1.0	1.2	p1.3	p1.3	p1.2	p1.2	p1.1	p1.2	1.9	1.4	1.6	0.8
25	1.0	1.1	1.4	1.8	2.1	2.0	2.0	2.0	2.1	2.0	1.2	1.1	1.0
26	1.1	1.0	1.4	1.8	2.0	2.0	2.0	1.9	1.9	1.4	1.2	1.0	0.8
27	1.0	1.0	1.1	1.8	1.8	2.0	1.9	1.8	2.0	1.8	1.3	1.0	0.8
28	1.0	1.0	1.8	1.7	2.0	2.1	2.0	2.0	1.8	1.8	1.0	1.1	p0.9c
29	...c	...c	...c	...c	...c	1.9	2.3	2.1	1.8	1.4	1.2	1.2	1.0
30	1.0	1.8	1.8	1.9	2.1	2.2	2.2	2.2	2.1	p1.6c	1.4	1.2	0.7
31													
* MEAN	0.9	1.0	1.4	1.6	2.0	1.9	2.0	1.9	1.8	1.7	1.3	1.2	0.8

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.3	2.5	2.7	3.2	3.3	3.6	3.5	3.4	3.2	2.9	2.6	2.0	0.8
2	1.4	1.4	2.8	3.1	3.4	3.6	3.6	3.4	3.3	3.0	2.4	2.2	1.0
3	1.6	2.4	2.8	3.1	3.5	p4.0	3.7	3.6	3.4	3.0	2.3	2.1	0.9
4	2.4	2.3	2.9	3.3	3.4	3.5	3.4	3.4	3.4	3.0	2.8	2.2	2.1
5	p2.0c	p2.4c	p3.0c	3.4	3.4	3.5	3.4	3.5	3.4	3.2	2.8	2.0	1.1
6	1.6	2.4	2.9	2.9	3.5	3.5	3.5	3.4	3.5	2.9	2.6	2.0	1.0
7	1.4	2.2	2.9	3.4	3.5	3.6	3.6	3.5	3.4	3.0	3.8	2.1	0.8
8	1.2	2.3	2.8	3.2	3.4	3.4	3.5	3.5	3.4	3.0	2.8	2.3	1.0
9	1.4	2.2	2.9	3.3	3.5	3.5	3.6	3.6	3.4	2.9	2.7	2.7	1.1
10	1.4	2.4	2.7	3.4	3.4	3.5	3.7	3.5	3.4	3.4	2.8	2.2	1.4
11	1.6	2.4	2.9	3.2	3.5	3.6	3.5	3.6	3.4	3.0	2.7	2.0	0.8
12	1.2	2.4	2.8	3.3	3.4	3.5	3.5	3.4	3.4	3.0	2.7	2.1	1.0
13	1.6	2.5	2.8	3.3	3.4	3.5	3.5	3.5	3.4	3.0	2.7	2.[illegible]	1.1
14	1.6	2.4	3.1	3.2	p3.4c	3.5	p3.5c	3.5	3.4	3.0	2.5	2.1	1.0
15	1.6	2.5	3.1	3.4	3.5	3.6	3.8	3.6	3.3	3.1	2.9	2.2	0.9
16	1.0	2.3	3.7	3.2	p3.4c	3.6	3.6	p3.6c	3.5	3.1	2.8	2.3	1.0
17	p1.6c	p2.5c	2.9	3.3	3.3	3.6	3.6	3.8	3.4	3.1	3.7	2.0	1.1
18	2.0	2.3	2.9	3.3	p3.4c	3.6	3.5	3.6	3.4	p3.0c	2.7	2.1	1.8
19	1.5	2.4	2.8	3.2	3.5	3.6	3.8	3.7	3.4	3.0	2.7	2.2	1.2
20	1.7	2.4	2.9	3.4	3.5	3.7	3.7	3.5	3.4	3.1	2.7	2.2	1.0
21	1.8	2.7	2.9	3.3	3.5	3.7	3.7	3.7	3.4	3.3	2.7	2.1	1.1
22	1.8	2.4	3.0	3.4	p3.5c	p3.6c	3.7	3.8	3.4	3.4	2.8	2.1	1.0
23	1.8	2.5	3.0	3.4	3.5	3.8	3.8	3.8	3.4	r3.1c	2.8	2.2	0.8
24	1.7	2.2	2.9	3.4	3.6	3.8	3.8	3.7	3.5	3.0	2.7	2.3	1.3
25	1.8	2.4	3.0	3.4	3.6	3.6	3.6	3.6	3.4	3.2	2.6	2.4	1.1
26	1.8	2.5	3.0	3.2	3.5	3.7	3.6	3.6	3.4	2.9	2.6	2.[illegible]	1.1
27	1.8	2.6	3.1	3.4	3.5	3.6	3.7	3.5	3.4	3.0	2.8	2.3	0.9
28	1.8	2.6	2.9	3.4	3.4	3.7	3.7	3.5	3.4	3.0	2.7	2.7	...c
29	...c	...c	...c	...c	...c	3.9	3.9	3.6	3.4	3.1	2.7	2.3	1.2
30	1.8	2.7	3.0	3.4	3.6	3.7	3.6	3.6	3.6	p3.2c	2.8	2.3	0.8
31													
* MEAN	1.6	2.4	2.9	3.3	3.5	3.6	3.6	3.6	3.4	3.1	2.8	2.2	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 231

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1942 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — OCTOBER 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.7	p7.7f	p5.8f	4.6	3.5	2.9	5.2	7.4	8.3	8.7	7.7	7.6	7.3	7.1	6.7	7.9	7.8	7.6	7.4	7.2	6.7	p6.7f	6.7	7.4	6.8
2	7.1	6.5	5.5	3.9	2.7	1.8	p5.1c	p7.3c	p8.4c	8.8	9.1	7.8	8.3	8.2	8.7	6.7	7.8	8.5	9.4	p7.8c	p7.7c	7.1	p7.5c	7.6	7.1
3	p7.5f	p5.6f	p5.5f	p4.0f	p4.0f	p4.6f	5.1	7.2	8.5	9.0	9.0	7.8	7.5	7.6	p8.0	p8.0	8.0	8.3	8.8	p8.7	8.8	9.9	10.0	9.3	7.5
4	9.2	7.6	6.7	6.8	6.2	p5.4f	5.4	8.3	9.2	10.0	9.0	8.9	9.0	9.5	9.3	9.7	9.5	9.0	8.5	p7.7c	p7.7c	p7.6c	p7.6c	p7.2c	8.1
5	p7.2c	7.2	7.2	p5.6c	5.5	4.3	6.5	8.2	8.7	9.8	9.0	8.4	8.6	8.8	p9.0c	8.4	8.8	8.6	9.0	9.0	8.6	8.3	8.9	8.4	8.0
6	6.8	6.4	5.3	3.9	3.2	3.0	5.2	7.7	8.5	8.7	8.4	8.4	8.5	9.0	9.0	9.1	9.2	9.4	9.5	9.2	8.4	p8.4f	p8.3f	8.3	7.6
7	8.3	6.0	p6.0c	6.1	p4.8f	4.4	6.6	7.2	9.2	9.7	9.2	8.8	8.9	9.3	9.1	8.5	8.8	9.3	9.4	p9.4c	p8.7c	p8.4	p7.7	p7.5	8.0
8	p6.7c	p6.2c	5.9	5.1	4.3	4.0	6.7	7.8	9.5	p8.5c	p8.2c	p8.2c	p8.6c	p9.3c	10.5	10.8	11.3	11.5	10.7	9.8	8.8	7.6	p7.5f	p7.3f	8.1
9	6.3	6.5	p4.2	3.6	2.2	1.8	5.3	8.0	9.3	9.2	8.0	7.7	8.3	9.3	10.5	11.0	11.0	11.1	p10.8f	p10.3f	p9.2f	p8.4f	p8.4f	p9.2f	7.9
10	6.5	6.0	4.8	4.1	2.9	2.1	5.6	7.9	9.1	8.2	7.1	7.1	7.9	8.5	8.7	9.1	9.8	9.5	9.7	9.7	9.0	8.7	7.0	6.1	7.3
11	5.7	5.6	4.9	4.2	3.1	2.5	5.6	...c	...c	...c	...c	p7.2c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
12	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.3	7.2	6.9	7.4	6.3	9.0	10.0	9.5	9.5	8.4	8.8	p8.7f	8.6	...
13	8.2	6.7	6.2	6.0	5.7	4.5	6.7	8.8	10.3	10.0	10.3	p8.7	8.2	7.7	8.4	p8.4c	9.4	9.8	10.4	9.6	9.8	10.1	9.7	7.9	8.4
14	6.7	6.3	5.0	4.8	4.3	3.7	6.5	8.7	9.2	9.5	10.1	7.9	8.1	8.4	8.4	8.2	8.5	9.2	9.8	9.6	8.3	8.1	7.8	7.2	7.7
15	7.1	6.7	p5.9f	p5.0f	p4.5f	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.0	5.0	9.3	9.7	9.9	9.8	9.2	7.9	...c	...
16	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.2	10.5	p8.4c	p7.4c	7.6	8.2	8.9	9.5	10.2	10.7	9.5	9.0	8.2	7.5	7.5	...
17	6.5	5.8	5.4	5.3	4.7	p4.2f	5.6	8.2	9.6	9.7	9.9	8.3	7.4	7.7	7.9	8.2	6.7	8.9	9.1	8.5	8.0	8.0	7.3	7.5	7.5
18	7.4	6.4	4.7	3.9	3.6	3.7	6.5	8.0	8.7	9.2	9.8	8.7	8.2	7.5	8.0	8.6	9.0	9.7	10.1	9.3	p8.4f	p8.3f	8.3	8.2	7.7
19	7.5	6.4	5.3	4.9	4.8	p5.2f	5.7	7.7	9.3	...c	...c	...c	...c	...c	...c	...c	...c	10.0	9.5	9.5	8.4	8.1	8.3	9.6	...
20	9.1	7.3	p5.8c	p4.8c	p5.4c	p5.4c	6.9	9.1	9.9	p9.0c	p8.0c	7.2	8.0	9.0	p9.5c	p9.4c	9.3	9.5	9.3	9.4	8.7	9.5	10.6	11.2	8.4
21	10.1	8.0	6.1	4.8	3.8	3.4	6.0	8.3	9.4	8.0	7.7	7.5	8.4	9.0	p10.0c	11.1	11.2	11.4	11.3	11.5	11.2	10.2	8.3	p8.3f	8.5
22	6.1	5.0	4.7	4.2	3.2	3.0	6.0	7.8	8.5	7.0	6.9	p7.2c	7.3	7.5	p8.0c	p9.0c	10.1	10.6	10.4	9.3	9.5	8.6	7.2	6.0	7.2
23	5.1	3.9	p2.5b	p1.7b	p1.4b	p2.2b	5.7	7.6	8.7	8.4	7.2	p7.6c	8.0	8.0	p8.2c	p9.1c	9.0	8.7	9.2	8.5	7.4	7.0	7.2	6.5	6.6
24	6.5	5.6	4.0	3.0	1.9	2.3	5.8	8.1	9.3	9.6	8.4	8.1	7.8	8.0	8.4	9.2	9.7	10.0	9.7	9.6	8.7	8.5	8.3	7.2	7.4
25	7.0	6.0	4.9	4.8	p3.4f	2.0	5.8	8.0	8.5	10.0	10.6	9.4	9.4	9.9	10.1	10.0	9.8	10.7	10.8	9.5	9.1	8.6	p7.4f	6.7	8.0
26	p6.7f	p5.9f	p4.9f	4.7	4.5	3.5	6.2	8.2	9.4	9.9	p10.2c	p9.4c	8.5	9.2	9.2	p9.4c	p9.6	8.7	8.4	8.4	7.3	7.0	6.6	p6.5f	7.6
27	p6.3f	5.8	4.8	4.0	3.5	3.0	6.5	8.2	9.4	10.0	9.8	p9.0c	p8.5c	p8.7c	p9.5c	p10.0c	10.9	11.3	10.9	9.7	8.9	p8.2f	p7.4f	p6.9f	8.0
28	p6.7f	p6.0f	4.7	p3.8f	3.5	p2.4f	6.2	7.9	9.5	8.2	7.4	7.4	7.8	8.6	10.2	10.5	10.9	11.0	10.8	10.8	10.5	10.7	8.7	8.3	8.0
29	7.0	6.3	4.6	3.5	3.0	2.4	6.3	7.7	9.5	11.2	10.6	8.2	7.1	8.0	8.5	9.0	9.1	8.6	p8.8c	p9.0	p9.2	p8.7	7.7	8.2	7.6
30	8.2	7.0	6.3	6.0	5.4	p3.5	6.5	10.3	p10.4	p10.5	p10.2	p9.4	8.3	8.7	8.4	8.5	8.4	8.8	8.5	8.5	8.2	7.7	7.8	8.4	8.1
31	8.2	6.3	5.9	4.7	4.4	4.5	7.3	8.7	p8.9	p10.0	9.5	9.8	8.9	9.5	8.5	8.7	8.9	8.8	9.5	8.5	p8.2f	p7.7f	p7.2f	6.6	7.9
MEAN*	7.2	6.3	5.3	4.5	3.9	3.4	6.0	8.1	9.2	9.3	9.0	8.2	8.1	8.4	8.8	9.1	9.4	9.6	9.7	9.2	8.7	8.4	8.0	7.8	7.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 232

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1942 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS OCTOBER 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	230	220	220	230	240	240	260	300	330	350	350	370	q390	390	390	310	240	270	280	280	290	250	270	289
2	250	230	230	220	220	260	250	240	330	320	350	330	370	330	350	350	310	240	250	250	270	260	290	300	283
3	310	320	330	330	340	310	250	300	310	320	380	360	370	350	q350	q320	300	240	270	290	290	240	230	230	306
4	270	280	290	280	q300c	290	240	270	320	300	310	330	330	360	360	320	290	250	260	290	270	280	q250	q270	292
5	270	240	240	230	230	230	240	250	280	310	320	320	330	330	q330c	300	300	250	260	270	290	280	260	260	277
6	270	240	210	230	250	290	240	280	300	310	340	320	340	320	300	300	310	250	260	280	300	320	230	250	261
7	290	290	280	280	250	260	240	290	300	310	330	340	320	340	330	330	300	250	240	290	280	270	280	280	290
8	290	270	290	260	250	250	250	280	290	330	340	q340c	q330c	q330c	320	290	280	240	270	320	350	310	260	260	292
9	270	220	230	240	240	280	240	280	310	330	350	340	340	350	330	300	290	250	270	260	270	240	250	260	282
10	260	230	250	240	240	240	240	290	300	330	350	350	360	330	330	320	290	240	260	260	230	230	260	280	280
11	290	270	240	220	240	250	240	...c	...c	...c	...c	230	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
12	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	340	360	350	330	310	310	240	260	330	310	290	290	260	...
13	270	250	250	240	240	240	240	260	280	320	340	330	360	340	330	q310c	290	250	280	260	260	240	220	240	278
14	240	230	230	260	260	250	250	260	290	300	340	310	360	360	340	320	290	240	240	240	240	230	220	230	272
15	260	270	260	260	290	280	260	250	...c	...c	...c	...c	...c	...c	...c	300	300	250	270	260	250	260	280	250	...
16	250	250	230	250	290	280	240	250	270	300	320	q330c	350	350	350	300	280	250	240	270	270	240	240	250	277
17	270	260	260	260	280	260	250	270	300	320	360	350	350	350	330	340	300	240	260	280	300	270	280	260	292
18	240	210	230	240	250	250	240	260	280	300	340	330	340	330	340	330	300	240	250	290	300	230	290	250	278
19	250	230	230	250	290	300	250	280	310	...c	...c	...c	...c	...c	...c	...c	...c	260	260	290	320	270	260	240	...
20	260	250	240	280	280	280	250	280	310	q320c	q340c	340	340	340	330	q320c	310	250	250	290	330	280	260	240	290
21	230	230	220	230	230	230	240	280	310	320	350	340	320	320	q310c	290	300	240	260	250	240	290	330	340	279
22	310	290	260	250	250	240	240	290	310	340	380	q370c	360	320	q310c	q300c	300	240	250	270	250	230	230	270	266
23	250	220	q240b	q250b	q270b	q270b	240	280	300	330	380	q370c	330	330	q320c	q310c	290	240	250	280	310	310	310	290	290
24	270	240	220	210	240	260	240	270	310	310	330	360	370	350	330	320	290	230	250	290	280	270	260	300	284
25	300	300	280	290	330	300	240	270	320	320	330	330	350	340	320	320	300	220	250	280	300	290	300	330	300
26	330	320	290	260	230	240	240	280	290	330	q350c	q350c	350	330	340	330	290	230	250	280	310	310	350	280	298
27	250	240	230	230	220	240	250	270	280	330	360	q360c	q350c	q340c	q330c	310	280	240	260	280	300	310	340	350	290
28	310	240	230	240	220	230	250	270	310	320	350	370	360	340	310	340	320	250	270	250	220	210	220	250	278
29	250	220	230	250	330	330	260	280	310	310	330	350	360	350	340	300	290	250	270	270	260	260	330	320	295
30	260	250	280	290	280	q270	240	270	290	290	320	340	340	340	310	290	280	250	270	290	290	320	290	250	268
31	230	230	230	240	260	280	230	270	290	300	310	340	330	340	320	300	290	250	270	330	330	290	320	290	286
MEAN*	268	252	238	251	261	264	244	272	300	317	343	339	348	341	331	316	296	244	259	280	284	271	273	272	286

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 233

OCTOBER 1942 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — OCTOBER 1942

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.2	4.5	4.6	4.7	4.6	4.7	4.7	4.6	4.3	4.2	...	...
2	...	p4.1c	p4.4c	4.6	4.6	4.6	4.8	4.5	4.6	4.6	4.2	...	...
3	...	4.1	4.1	4.5	4.8	4.7	4.7	4.5	4.6	4.5	4.2	...	...
4	...	4.2	4.5	4.5	4.6	4.7	4.7	4.6	4.8	4.5	4.0	...	...
5	...	4.0	4.4	4.6	4.6	4.6	4.7	4.6	p4.5c	4.5	4.2	...	...
6	...	4.1	4.4	4.5	4.6	4.6	4.6	4.5	4.4	4.3	4.2	...	...
7	...	p4.2c	p4.4c	4.6	4.5	4.7	4.6	4.7	4.4	4.5	4.3	...	...
8	...	4.2	4.3	4.5	4.5	p4.6c	4.6	p4.7c	4.6	4.4	4.2	...	...
9	...	4.2	4.6	4.8	4.6	4.7	4.7	4.8	4.6	4.3	4.2	...	...
10	...	4.3	4.5	4.6	4.7	4.7	4.7	4.7	4.5	4.5	4.4	...	...
11	...	...c	...c	...c	...c	4.7	...c	...c	...c	...c	...c	...	...
12	...	...c	...c	...c	...c	4.7	4.6	4.6	4.5	4.5	4.3	...	...
13	...	4.3	4.5	4.5	4.6	4.7	4.8	4.6	4.5	...c	4.1	...	...
14	...	4.3	4.5	4.7	4.7	4.6	4.8	4.6	4.5	4.5	4.2	...	...
15	...	...c	...c	...c	...c	...c	...c	...c	...c	4.5	4.4	...	...
16	...	p4.3c	p4.4c	4.5	4.5	p4.6c	4.8	4.7	4.5	4.3	4.2	...	...
17	...	4.2	4.4	4.5	4.7	4.7	4.7	4.6	4.6	4.6	4.3	...	...
18	...	4.2	4.5	4.5	4.6	4.6	4.6	4.7	4.5	4.7	4.3	...	...
19	...	4.3	4.5	...c	...c	...c	...c	...c	...c	...c	...c	...	...
20	...	4.3	4.5	p4.6c	p4.6c	4.7	4.7	4.6	4.5	p4.5c	4.5	...	...
21	...	4.3	4.7	4.6	4.6	4.6	4.7	4.5	p4.5c	4.5	4.5	...	...
22	...	4.5	4.6	4.6	4.6	p4.7c	4.7	4.5	p4.5c	p4.5c	4.4	...	...
23	...	4.4	4.6	4.5	4.7	p4.7c	4.6	4.5	p4.5c	p4.4c	4.3	...	...
24	...	4.4	4.6	4.5	4.6	4.7	4.7	4.7	4.5	4.3	4.3	...	...
25	...	4.3	4.8	4.6	4.8	4.7	4.7	4.7	4.5	4.5	4.4	...	...
26	...	4.2	4.5	4.8	p4.8c	p4.7c	4.7	4.6	4.8	4.6	4.3	...	...
27	...	4.5	4.5	4.8	4.9	p4.9c	p4.8c	p4.7c	p4.6c	4.5	4.2	...	...
28	...	4.3	4.5	4.6	4.8	4.9	4.9	4.7	4.5	4.4	4.4	...	...
29	...	4.3	4.7	5.0	4.7	5.0	4.9	4.8	4.7	4.6	4.5	...	...
30	...	4.3	4.6	4.7	5.1	5.1	5.1	4.9	4.8	4.4	4.2	...	...
31	...	4.4	4.5	4.8	5.0	5.3	5.1	5.0	4.5	4.4	4.4	...	...
* MEAN	...	4.3	4.5	4.6	4.7	4.7	4.7	4.6	4.6	4.3	4.3	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	220	200	220	200	200	190	200	200	200	200	...	...
2	...	p230c	p220c	220	210	200	200	200	200	210	210	...	...
3	...	240	230	210	210	200	210	190	200	200	200	...	...
4	...	240	210	210	200	200	190	190	200	220	200	...	...
5	...	220	220	210	210	200	200	200	p200c	200	220	...	...
6	...	220	200	210	200	210	200	200	200	190	200	...	...
7	...	p220c	p210c	200	200	200	190	200	200	200	210	...	...
8	...	230	220	210	200	p210c	200	p200c	200	190	240	...	...
9	...	230	210	210	200	210	200	200	200	200	200	...	...
10	...	220	210	200	200	200	190	200	190	190	190	...	...
11	...	...c	...c	...c	...c	200	...c	...c	...c	...c	...c	...	...
12	...	...c	...c	...c	...c	200	200	200	200	200	210	...	...
13	...	230	220	210	220	200	200	200	200	p210c	210	...	...
14	...	230	210	210	210	200	200	200	200	210	220	...	...
15	...	...c	...c	...c	...c	...c	...c	...c	...c	190	200	...	...
16	...	p230c	p210c	200	200	p200	190	190	180	200	220	...	...
17	...	230	200	210	210	210	190	200	190	190	220	...	...
18	...	230	210	200	200	200	200	190	200	200	200	...	...
19	...	230	220	...c	...c	...c	...c	...c	...c	...c	...c	...	...
20	...	230	220	p210c	p210c	200	200	200	200	p200c	200	...	...
21	...	230	210	200	210	200	200	200	p200c	210	200	...	...
22	...	210	210	200	200	p200c	190	190	p200c	p220c	230	...	...
23	...	230	220	200	210	p200c	200	200	p200c	p200c	190	...	...
24	...	220	200	210	200	200	200	210	200	190	200	...	...
25	...	230	220	220	220	210	200	200	210	210	210	...	...
26	...	230	210	200	p210c	p200c	200	200	p210c	p210c	220	...	...
27	...	230	230	220	210	...c	...c	...c	...c	200	200	...	...
28	...	230	210	200	200	200	200	200	200	200	210	...	...
29	...	230	220	230	220	210	210	210	200	220	200	...	...
30	...	230	230	230	p220c	200	190	200	210	210	210	...	...
31	...	240	230	220	220	210	210	210	210	200	200	...	...
* MEAN	...	228	215	210	207	202	198	199	200	202	208	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 234

OCTOBER 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1942

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	1.2	1.4	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.3	1.1	0.9	1.9	2.4	2.9	3.7	3.0	3.6	3.6	3.6	3.4	3.1	2.8	2.2	0.9
2	0.8	0.8	p2.0c	2.0	2.0	2.1	2.1	2.0	2.0	1.4	1.2	1.3	1.0	1.5	2.2	p2.9c	3.4	3.0	3.5	3.0	3.5	3.5	3.2	3.7	2.3	p3.1
3	1.0	1.2	1.3	1.8	1.9	2.2	2.2	2.0	1.9	1.5	1.2	1.2	1.0	1.8	2.6	3.0	3.4	3.5	3.6	3.6	3.6	3.5	3.1	3.0	2.2	1.4
4	1.2	1.2	1.4	2.0	2.2	2.2	2.1	2.0	2.1	1.8	1.2	1.0	0.8	1.8	2.4	2.9	3.4	3.5	3.6	3.6	3.4	3.5	3.2	2.7	2.2	0.8
5	1.0	1.8	1.4	1.9	2.0	p2.2	2.1	2.0	p1.9c	1.8	1.2	1.1	1.0	1.9	2.5	3.0	3.5	3.5	3.5	3.5	3.0	p3.5c	3.0	2.7	2.1	1.2
6	1.1	1.1	1.4	1.7	1.8	1.8	1.9	1.8	1.8	1.7	1.3	1.1	1.0	1.8	2.6	2.9	3.5	3.0	3.6	3.6	3.9	3.5	3.1	2.8	1.0	0.9
7	1.3	1.3	1.4	1.7	1.7	1.8	1.7	1.8	1.8	1.4	1.4	1.0	1.0	1.8	2.6	3.2	3.4	3.5	3.5	3.0	3.5	3.5	3.0	2.7	2.2	2.0
8	1.1	1.8	2.8	2.7	2.8	p2.4c	2.1	p2.4c	2.7	1.8	1.8	1.0	0.8	2.0	2.6	3.3	3.4	3.4	p3.5c	3.6	p3.5c	3.5	3.0	3.4	2.1	1.1
9	1.0	1.1	1.4	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.4	1.0	0.8	1.9	1.6	3.0	3.4	3.0	3.8	3.7	3.6	3.4	3.4	3.0	2.4	1.2
10	0.9	1.0	1.2	1.4	1.8	1.8	1.8	2.1	1.8	1.7	1.4	1.2	1.0	1.8	2.7	3.3	3.4	3.5	3.0	3.8	3.8	3.5	3.1	2.8	[illegible]	1.2
11	1.0	...	...	...	...	p1.8c	...c	...c	...c	...c	...c	...c	...c	1.7	...c	...c	...c	...c	3.7	...	...	...	...	...	...	...
12	...c	...c	...c	...c	...c	1.8	2.2	1.8	1.8	1.7	1.4	1.2	1.0	...c	...c	...c	...c	...c	3.9	3.8	3.7	3.6	3.0	[illegible]	[illegible]	1.4
13	1.3	1.7	1.7	1.8	1.8	2.0	1.8	2.0	1.8	p1.7c	1.4	1.1	1.0	2.0	2.8	3.0	3.5	3.6	3.8	3.6	3.6	3.5	p3.6c	3.0	[illegible]	[illegible]
14	1.1	1.7	1.8	1.8	1.8	1.8	2.0	1.8	1.8	1.8	1.4	1.8	1.1	2.0	2.7	3.1	3.5	3.5	3.6	3.0	3.7	3.5	2.8	3.7	2.2	1.0
15	p1.1c	p1.4c	p1.4c	p1.6c	p2.2c	p2.7c	p2.6c	p2.5c	p2.7c	1.8	1.4	1.2	1.0	1.4	2.7	3.3	3.4	...c	...c	...c	...c	3.5	3.1	2.6	[illegible]	[illegible]
16	p1.4c	p1.4c	2.6	1.8	1.8	p2.2c	p2.3c	1.9	1.8	1.8	1.7	1.7	1.0	2.1	p2.6c	3.4	3.4	3.4	p3.6c	3.7	3.6	3.4	2.9	[illegible]	2.1	1.7
17	1.1	1.7	1.8	1.8	1.8	1.9	1.8	1.9	1.7	1.7	1.2	1.2	0.9	1.9	2.5	3.0	3.5	3.7	3.8	3.8	3.7	3.6	3.2	3.0	2.2	1.2
18	1.6	1.6	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.4	1.6	1.0	2.0	1.6	3.2	3.5	3.7	3.8	3.8	3.7	3.5	3.1	3.0	2.2	1.4
19	1.0	1.7	1.5	...c	...c	...c	...c	...c	...c	...c	...c	1.6	1.0	3.2	2.7	3.1	...c	...c	...c	...c	...c	...c	...c	...c	1.5	1.1
20	1.0	1.6	0.7	p0.8c	p0.8c	0.8	p0.8	1.8	p1.8c	p1.6c	1.4	1.0	0.8	1.9	2.4	3.0	p3.2c	p3.4c	3.7	p3.7c	3.5	3.3	p3.1c	2.9	2.2	1.0
21	0.8	1.0	1.7	1.8	1.8	1.7	1.9	1.8	p1.8c	1.8	1.4	1.0	0.7	2.0	2.6	2.9	3.1	3.4	3.6	3.7	3.4	p3.3c	[illegible]	2.7	3.1	[illegible]
22	1.0	1.0	1.8	1.8	1.8	p1.9c	2.2	2.2	p2.0c	p1.8c	1.8	1.0	0.5	2.0	2.6	3.0	3.4	3.6	p3.6c	3.7	3.5	p3.3c	p3.1c	[illegible]	[illegible]	1.7
23	1.0	1.0	1.4	1.8	p1.8c	p1.8c	1.8	1.8	p1.8c	p1.7c	1.5	1.0	1.0	2.0	2.5	3.1	3.4	3.7	p3.0c	3.6	3.4	p3.4c	p3.1c	[illegible]	[illegible]	[illegible]
24	1.0	1.0	1.5	1.8	1.9	2.0	2.0	2.0	2.0	1.4	1.3	1.1	0.9	2.0	2.7	3.1	3.4	3.5	3.7	3.5	3.6	3.5	3.0	[illegible]	[illegible]	[illegible]
25	1.0	1.8	1.8	1.4	1.8	1.9	1.5	1.4	1.4	1.4	1.3	1.1	1.0	1.9	2.7	3.0	3.4	3.4	3.6	3.6	3.5	3.4	3.1	[illegible]	[illegible]	[illegible]
26	1.0	1.0	1.4	1.8	p1.8c	p2.3c	2.8	2.1	p2.0c	p1.6c	p1.2c	1.0	1.0	2.2	2.7	3.1	3.4	p3.5c	p3.7c	4.2	3.6	p3.4c	[illegible]	2.5	[illegible]	1.0
27	0.9	1.2	1.4	1.5	1.8	...c	...c	...c	...c	p2.0c	1.1	1.0	1.0	2.2	2.5	3.2	3.5	3.7	...c	...c	...c	...c	3.0	2.6	2.4	1.4
28	1.0	1.0	1.4	1.4	1.5	1.4	1.8	1.5	1.9	1.5	1.1	1.0	0.8	2.2	2.7	3.1	3.4	3.6	3.8	3.7	3.6	3.4	3.1	[illegible]	[illegible]	1.1
29	1.0	1.0	1.2	1.1	2.0	1.8	1.7	2.0	2.0	1.7	1.2	1.0	0.9	1.9	2.6	3.0	3.3	3.4	3.6	3.7	3.6	3.5	[illegible]	2.7	[illegible]	[illegible]
30	1.0	1.1	1.6	1.8	p2.3c	2.7	2.4	2.4	1.7	1.7	1.1	1.0	0.7	2.2	2.6	3.2	3.4	p3.5	3.6	3.6	3.6	3.5	3.3	3.7	[illegible]	1.1
31	0.8	1.0	2.7	2.1	2.7	2.7	2.7	2.7	2.3	1.7	1.0	1.0	0.8	2.2	2.7	3.2	3.4	3.6	3.6	3.7	3.6	3.4	3.2	2.7	2.2	[illegible]
MEAN*	1.1	1.3	1.6	1.7	1.9	2.0	2.0	2.0	1.9	1.7	1.3	1.2	0.9	2.0	2.5	3.1	3.4	3.5	3.6	3.7	3.6	3.5	3.1	3.0	2.2	[illegible]

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 235

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1942 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — NOVEMBER 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p6.4f	6.1	5.2	5.1	3.5	2.8	6.8	p9.7	p10.1	p11.9	11.4	12.0	11.8	12.0	12.0	11.8	11.8	10.6	8.5	.7	p8.2f	p7.7f	p7.3f	p6.9f	8.7
2	p6.4f	p6.1f	p5.1f	p3.7f	p3.9f	3.0	6.7	9.1	p11.0	p11.6	10.4	9.6	9.0	9.5	9.6	9.8	9.9	9.6	.5	.2	p7.7f	p7.3f	p6.0f	7.5	7.9
3	7.5	6.5	5.5	5.2	5.2	5.1	7.1	8.5	10.1	10.4	9.5	p10.8	10.8	11.2	11.3	11.5	10.9	8.7	7.9	7.5	5.5	p5.6f	p5.8f	p6.1f	8.1
4	p6.4f	p6.2f	6.4	4.2	3.2	3.9	7.1	9.1	9.6	11.2	11.6	11.8	11.8	p12.0	12.2	12.1	11.1	8.4	.4	.5	8.1	7.4	6.8	6.7	8.5
5	6.4	6.1	5.3	4.3	3.3	3.4	6.2	8.4	9.0	8.2	8.5	p8.8	8.7	9.0	9.3	p9.7c	p9.5c	9.3	8.7	8.5	8.5	7.4	5.7	5.7	7.4
6	5.6	5.6	4.3	3.2	2.6	3.0	6.5	8.3	10.2	10.8	10.6	10.3	10.8	11.2	11.2	11.9	10.5	10.0	p9.0	.2	p7.8f	p7.4f	p7.0f	6.6	8.0
7	7.1	7.2	p5.5	4.3	2.9	2.9	6.1	8.4	8.7	p8.5	8.5	10.1	10.4	10.6	10.8	10.2	9.0	8.5	8.5	8.6	6.3	8.3	7.8	7.6	7.9
8	7.5	6.5	5.3	3.9	3.0	3.4	6.7	9.0	9.7	10.2	9.0	9.0	9.4	10.0	10.0	10.5	11.5	11.5	11.1	10.3	p9.7f	p9.1f	p8.6f	p8.0f	8.5
9	7.3	5.9	4.0	p3.5f	p3.2f	3.0	6.3	8.4	9.1	8.4	8.4	9.1	10.0	10.8	11.5	11.0	10.7	10.7	10.4	9.6	9.0	8.3	p7.0f	p5.8f	8.0
10	p4.5f	3.9	3.5	p2.6	4.1	2.8	6.4	8.5	9.3	6.8	7.7	8.5	8.9	9.5	10.5	10.9	11.0	11.0	11.0	10.6	10.0	8.3	p7.0f	p5.1f	7.6
11	p4.8f	p4.4f	p4.1f	3.8	3.7	3.9	6.2	8.2	9.1	9.2	8.7	8.3	8.3	8.3	8.1	8.8	9.4	9.7	9.5	9.3	9.1	8.3	7.8	6.5	7.4
12	6.3	6.1	p5.4f	p4.5f	p4.5f	4.5	6.6	8.1	9.1	9.6	9.2	8.3	8.4	9.0	9.4	9.8	9.6	9.6	9.5	9.0	9.0	8.2	6.9	6.4	7.8
13	6.0	4.7	4.6	4.4	4.2	3.7	6.4	7.3	8.7	9.7	10.0	9.7	9.8	9.3	8.4	7.7	7.5	7.8	8.5	8.5	7.6	6.8	6.7	6.0	7.2
14	4.8	4.7	4.6	3.5	3.8	2.4	6.0	8.2	.8	10.0	10.2	10.2	10.7	10.3	9.0	8.1	8.1	7.9	7.6	7.2	6.1	p5.7f	p5.3f	p4.9f	7.0
15	4.5	4.0	3.7	3.0	p2.9f	p2.8f	6.1	7.9	9.0	9.6	9.3	9.5	8.9	8.3	8.3	8.6	8.3	7.8	7.5	7.7	p6.2f	6.3	6.3	6.9	6.8
16	6.5	5.8	5.7	4.9	4.5	3.9	6.1	7.8	8.4	8.7	8.6	9.4	9.8	10.4	10.3	9.7	8.7	7.7	7.0	6.8	p6.5f	p6.6f	p6.6f	6.7	7.4
17	6.6	p5.6	4.6	3.5	3.2	3.3	6.1	7.4	p8.0	p9.4	10.0	10.2	11.0	10.2	9.5	9.2	9.2	8.4	p7.1	6.9	7.0	6.1	p4.5f	p4.2f	7.1
18	p3.9f	p3.7f	p3.4f	3.1	1.9	2.6	6.2	7.7	8.3	9.0	9.4	8.9	8.8	9.0	8.8	9.4	9.9	9.6	9.5	8.9	8.3	7.3	6.8	5.8	7.1
19	p4.8f	3.7	p3.6f	p3.6f	p3.5f	3.5	5.8	7.5	8.5	8.5	8.5	8.0	8.4	8.8	8.8	9.4	9.6	9.8	9.9	9.7	9.0	7.2	6.1	p5.0f	7.1
20	3.8	p2.9f	p3.0f	p2.9f	p2.6f	p2.8f	5.1	6.7	8.3	8.8	9.3	9.2	9.3	9.1	9.6	10.4	11.0	11.0	10.5	9.9	9.0	8.3	7.0	5.5	7.3
21	3.8	3.5	3.0	3.5	p3.0f	3.5	5.5	7.1	8.3	8.3	8.5	8.5	8.4	8.5	8.7	9.2	9.6	9.7	9.5	9.1	8.7	8.3	6.8	4.0	7.0
22	p3.8f	p3.6f	p3.3f	p3.1f	p2.8f	2.6	5.8	7.9	9.0	9.3	9.0	8.4	9.2	10.0	10.4	10.8	10.7	10.6	10.2	9.7	8.4	6.9	4.4	4.3	7.3
23	p3.6f	2.8	2.5	2.4	2.4	3.0	5.8	7.4	7.8	7.8	8.2	8.5	9.6	10.3	10.4	10.1	10.2	10.2	8.0	7.9	p6.7f	p5.4f	p4.3f	p4.3f	6.6
24	p3.9f	p3.5f	p3.3f	p3.0f	p2.8f	2.9	7.0	8.4	8.9	9.5	10.1	11.0	10.6	10.9	11.0	10.7	10.8	9.4	9.2	8.7	7.4	5.8	4.5	4.4	7.4
25	4.3	4.1	4.2	p3.6f	p3.3f	p2.8f	5.9	8.2	9.4	9.4	9.5	9.1	8.2	8.9	9.7	10.0	10.4	10.4	9.7	10.4	9.8	7.1	6.7	6.3	7.5
26	5.8	5.5	p4.8f	p4.2f	p3.8f	3.0	6.9	8.8	10.2	10.0	9.0	8.7	8.5	8.7	9.3	9.9	10.2	10.4	10.6	10.2	9.0	8.2	7.8	7.0	7.9
27	6.5	5.5	5.0	4.5	4.5	3.3	6.8	8.4	9.2	8.9	9.5	9.2	9.0	9.9	10.6	10.8	11.2	11.2	11.6	10.8	8.4	6.6	6.7	6.4	8.1
28	5.8	4.6	4.2	4.2	3.2	2.9	6.7	7.8	9.3	10.7	10.4	9.2	8.0	8.2	8.6	10.0	9.9	10.3	10.3	9.7	8.6	6.7	6.0	4.7	7.5
29	4.4	3.8	4.0	3.9	4.1	3.9	7.0	8.4	9.5	10.2	10.8	11.4	9.9	9.0	9.1	9.4	9.4	9.5	9.2	8.8	8.4	8.2	6.7	6.0	7.7
30	5.6	4.8	4.3	4.4	4.2	4.0	6.7	8.6	9.5	10.1	10.6	11.0	10.7	9.7	8.5	8.5	8.4	8.2	8.0	7.8	7.5	7.5	7.5	8.2	7.7
31																									
MEAN*	5.5	4.9	4.4	3.8	3.5	3.3	6.4	8.2	9.1	9.5	9.5	9.5	9.6	9.3	9.8	10.0	9.9	9.6	9.2	8.9	8.1	7.3	6.5	6.0	7.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 236

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1942 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS NOVEMBER 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	280	240	230	230	230	250	250	265	285	300	290	310	300	330	320	300	270	240	270	270	360	380	370	340	288
2	310	240	230	230	230	240	230	210	320	300	350	360	350	320	290	310	210	250	280	280	290	290	280	310	280
3	280	220	250	240	240	240	240	280	280	300	310	320	320	310	320	290	290	250	270	290	280	310	390	400	288
4	370	280	210	220	260	270	250	240	290	300	310	320	320	320	300	320	300	250	260	260	270	350	350	330	290
5	270	230	230	210	240	280	240	265	290	300	330	320	330	340	350	300	270	240	270	300	300	330	370	350	290
6	270	210	220	230	230	270	240	270	290	310	340	340	320	320	330	300	300	250	260	290	290	390	270	290	285
7	250	210	230	240	260	310	250	280	300	300	330	320	340	330	310	310	310	240	250	270	260	280	300	280	282
8	240	220	220	230	260	270	240	300	310	320	320	330	330	320	310	300	280	240	260	300	290	290	230	280	279
9	250	230	220	230	250	260	240	270	310	340	320	320	300	310	300	300	300	250	260	290	300	300	380	340	286
10	310	260	230	250	250	260	240	270	310	300	370	340	340	340	320	310	320	320	260	290	300	330	360	350	301
11	360	360	200	190	270	300	250	300	300	320	350	340	340	340	360	340	330	250	240	280	270	300	330	340	302
12	340	270	280	260	250	250	230	280	300	310	360	350	360	350	350	340	290	230	250	280	280	350	340	340	302
13	300	280	270	270	250	270	240	270	300	340	350	340	340	370	350	360	330	250	250	270	320	310	310	320	302
14	320	250	270	260	330	280	240	270	300	300	340	340	340	360	320	320	240	250	270	300	350	380	400	340	307
15	270	260	230	240	260	270	240	280	290	310	330	350	380	360	360	350	310	250	260	280	280	300	270	260	291
16	230	230	230	230	260	280	230	270	280	300	320	320	360	340	330	330	340	240	260	280	270	300	290	240	282
17	250	190	190	270	240	270	240	300	310	q330	350	350	330	340	350	350	330	240	250	270	280	370	390	380	299
18	350	390	350	240	240	250	240	280	320	330	340	370	360	330	360	370	310	280	250	250	290	310	320	340	311
19	370	340	280	280	270	270	240	290	330	340	360	350	360	340	330	310	300	240	250	250	270	300	350	370	300
20	280	250	230	280	280	230	230	290	300	310	330	330	340	350	350	330	300	250	260	300	260	240	330	360	292
21	400	400	360	300	300	320	250	300	320	340	335	350	320	340	340	330	300	260	290	300	260	340	370	390	326
22	450	500	480	420	320	280	240	290	330	320	330	360	350	330	320	320	320	300	260	270	300	360	390	350	341
23	410	420	410	340	270	280	240	300	310	330	380	335	310	305	310	350	300	250	270	310	320	310	370	430	319
24	500	530	560	550	470	300	250	290	300	310	320	330	320	330	330	320	310	250	280	310	310	410	420	360	361
25	390	420	420	425	360	300	250	285	300	340	330	360	330	360	330	330	290	245	260	240	275	310	310	310	324
26	320	320	400	510	500	290	240	270	280	310	360	380	360	320	330	330	290	280	270	290	320	290	290	280	326
27	270	290	330	300	215	245	240	270	300	320	320	340	325	360	350	315	320	240	260	300	360	380	360	290	304
28	260	270	300	320	330	280	240	280	315	330	340	350	340	400	320	310	320	240	270	320	340	410	400	415	321
29	400	380	330	310	250	240	250	270	290	310	310	335	320	320	370	330	235	250	275	290	330	400	400	380	316
30	370	360	360	340	310	270	260	280	280	310	325	330	340	360	310	340	350	250	260	300	290	280	300	270	310
31																									
MEAN*	322	301	292	288	281	271	242	277	301	316	335	340	336	331	331	324	299	252	262	284	297	330	341	334	304

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 237

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1942 | NOVEMBER 1942

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.3	4.5	4.7	4.7	4.8	4.7	4.6	4.6	4.5	...	...	...
2	...	4.3	4.6	5.0	p4.9c	p4.8c	4.8	4.8	4.5	4.5	...	...	...
3	...	4.5	4.6	4.7	4.8	4.8	4.7	4.6	4.7	4.5	4.3	...	...
4	...	...	4.8	4.8	4.8	4.9	4.7	4.7	4.6	4.6	4.6	...	...
5	...	...	4.5	4.7	4.8	4.8	4.8	4.8	4.6	4.5	...	...	...
6	...	4.4	4.7	4.8	4.9	5.0	4.7	4.7	4.5	4.5	4.5	...	...
7	...	4.3	4.5	4.7	4.7	4.8	4.7	4.7	4.5	4.5	4.3	...	...
8	...	4.5	4.6	4.7	4.8	4.7	4.7	4.5	4.5	4.4	4.2	...	...
9	...	4.2	4.7	4.6	4.6	4.5	4.6	4.5	4.4	4.5	4.3	...	...
10	...	4.3	4.5	4.5	4.8	4.7	4.6	4.7	4.6a	4.5	4.4a	...	...
11	...	4.5	4.5	4.5	4.5	4.6	4.5	4.5	4.6	4.5	4.5	...	...
12	...	4.3	4.4	4.5	4.7	4.6	4.6	4.6	4.3	4.4	4.3	...	...
13	...	4.3	4.4	4.5	4.5	4.6	4.5	4.5	4.5	4.5	4.4	...	...
14	...	4.3	4.6	4.7	4.7	4.7a	4.7	4.5	4.4	4.3	4.3	...	...
15	...	4.3	4.4	4.4	4.6	4.5	4.6	4.5	4.5	4.5	4.3	...	...
16	...	4.3	4.6	4.5	4.7	4.6	4.6	4.5	4.5	4.4	4.4	...	...
17	...	4.2	4.3	4.5	4.5	4.5	4.5	4.5	4.4	4.5	4.3	...	...
18	...	4.3	4.5	4.5	4.5	4.7	4.6	4.5	4.6	4.5	4.4	...	...
19	...	4.3	4.4	4.5	4.5	4.5	4.4	4.5	4.3	4.3	4.0	...	...
20	...	4.4	4.4	4.6	4.6	4.6	4.7	4.5	4.3	4.5	4.4	...	...
21	...	4.5	4.5	4.6	4.7	4.7	4.6	4.7	4.5	4.5	4.4	...	...
22	...	4.4	4.7	4.7	4.7	4.8	4.8	4.7	4.6	p4.5a	4.5	4.3	...
23	...	4.4	4.6	4.7	4.8	4.7	4.8	4.6	4.8	4.7	4.2	...	...
24	...	4.4	4.6	4.8	4.8	4.8	4.8	4.8	4.7	4.6	4.4	...	...
25	...	4.4	4.6	4.7	4.8	4.9	4.7	4.8	4.6	4.8	4.3	...	...
26	...	4.3	4.5	4.6	4.9	5.0	4.9	4.7	4.8	4.6	4.3	3.9	...
27	...	4.4	4.6	4.9	4.9	4.8	4.7	4.8	4.8	4.5	4.5	...	...
28	...	4.5	4.7	4.8	4.8	4.8	4.8	4.7	4.8	4.5	4.6	...	...
29	...	4.3	4.5	4.7	4.8	4.8	4.8	4.6	4.9	4.5	4.4	...	...
30	...	4.4	4.5	4.8	4.9	4.9	4.8	4.8	4.6	4.8	4.5	...	...
31													
MEAN*	...	4.4	4.5	4.7	4.7	4.7	4.7	4.6	4.6	4.5	4.4	4.1	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	240	230	210	190	210	200	220	p250	220	...	...	...
2	...	270	230	250	p230c	p220c	210	205	210	210	...	...	...
3	...	230	220	230	220	190	200	210	210	210	210	...	...
4	...	...	230	220	210	205	210	200	200	200	200	...	...
5	...	...	210	200	190	200	180	200	200	200	...	...	...
6	...	230	200	200	210	200	205	200	210	205	200	...	...
7	...	220	220	210	210	200	200	210	200	210	210	...	...
8	...	230	200	210	210	210	200	190	190	200	220	...	...
9	...	230	210	210	210	200	190	190	200	200	220	...	...
10	...	230	210	200	200	190	200	210a	220	210	220	...	...
11	...	230	220	210	200	200	200	200	210	200	210	...	...
12	...	220	210	210	210	200	200	200	200	200	200	...	...
13	...	210	200	210	190	200	200	200	200	190	190	...	...
14	...	230	220	220	220	230	200	200	190	190	...	...	...
15	...	230	220	210	200	200	200	200	190	190	200	...	...
16	...	230	230	200	220	205	200	200	200	200	190	...	...
17	...	230	215	200	200	200	190	190	200	190	240	...	...
18	...	200	200	200	200	200	190	190	200	260	220	...	...
19	...	220	200	200	200	190	200	200	200	190	190	...	...
20	...	200	200	200	200	200	190	200	220	180	220	...	...
21	...	220	190	210	215	205	210	190	190	220	220	...	...
22	...	220	200	220	220	210	210	200	200a	210	230	250	...
23	...	220	200	200	200	190	170	200	210	210	210	...	...
24	...	240	230	215	200	205	210	200	200	210	220	...	...
25	...	220	220	200	200	200	195	210	190	210	225	...	...
26	...	220	220	210	205	200	200	200	190	200	210	250	...
27	...	230	210	210	210	200	200	210	200	225	210	...	...
28	...	220	210	210	210	210	190	200	200	200	210	...	...
29	...	230	210	210	195	200	190	200	200	200	210	...	...
30	...	240	230	210	210	200	190	200	190	200	190	...	...
31													
MEAN*	...	227	213	210	206	202	198	201	202	205	211	250	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 238

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1942 NOVEMBER 1942

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.0	2.2	p2.8	2.7	2.9	2.7	2.6	2.5	1.7	1.6	1.0	0.8
2	1.0	1.6	1.9	1.7	p1.7c	p1.8c	1.8	[illegible]	2.7	2.0	1.2	1.0	0.8
3	1.1	1.0	1.7	2.2	2.5	2.8	2.5	2.8	2.8	1.8	1.2	1.1	0.8
4	0.8	2.5	2.7	2.8	2.9	2.9	2.6	p2.8	1.4	1.1	1.1	1.0	0.8
5	1.0	1.0	1.7	2.7	2.7	p2.2	2.2	2.2	2.0	p1.5c	p1.1c	1.0	0.8
6	1.0	1.0	1.1	1.5	2.8	2.0	1.9	1.1	1.1	2.2	1.2	1.0	0.6
7	1.0	1.0	1.7	p2.7	2.7	2.2	2.1	1.8	1.7	1.7	1.1	1.0	0.8
8	0.6	1.0	1.2	1.7	1.7	2.0	2.2	[illegible]	1.1	1.7	1.1	1.0	0.6
9	0.6	1.0	1.8	2.1	2.2	p2.4c	2.7	2.3	2.2	1.8	1.7	1.0	1.0
10	1.0	1.2	1.4	1.5	1.9	2.0	2.3	1.9	1.8	1.7	1.8	0.9	0.9
11	1.0	0.7	0.6	1.0	p1.4	1.8	2.0	[illegible]	2.1	1.9	1.4	1.0	1.0
12	0.8	1.0	1.1	1.6	1.8	1.9	2.1	2.3	1.8	1.5	1.4	1.0	1.0
13	1.0	1.0	2.3	2.4	2.4	2.6	2.2	2.6	2.3	2.4	1.3	1.0	1.0
14	1.0	2.3	2.2	1.8	1.9	1.8	1.8	1.7	1.8	1.4	1.4	1.0	0.9
15	0.8	1.6	1.7	1.8	1.8	1.8	1.9	1.9	1.9	1.8	1.1	1.0	0.8
16	1.0	1.7	1.7	1.8	1.8	1.8	1.8	1.9	1.8	1.4	1.4	1.0	0.8
17	1.0	1.2	1.7	1.7	2.5	2.8	1.8	2.4	2.4	2.2	1.0	1.0	0.8
18	1.0	1.2	1.4	1.8	1.8	1.8	1.9	1.9	1.8	1.5	1.0	1.0	1.0
19	0.8	1.0	1.0	1.7	1.7	1.8	1.8	1.7	1.8	1.4	1.1	1.0	1.0
20	1.0	1.0	1.3	1.8	1.8	2.0	1.8	2.2	2.0	1.8	1.7	1.6	1.0
21	1.0	1.0	1.3	1.4	1.8	1.8	1.9	1.9	1.8	1.8	1.4	1.1	1.0
22	1.0	1.4	1.4	1.8	2.0	1.9	2.2	2.0	1.9	1.8	1.8	1.1	1.0
23	1.0	1.0	1.2	1.8	1.8	2.8	2.2	2.1	2.0	1.8	1.4	1.0	1.0
24	1.0	1.0	1.4	1.8	1.9	1.8	1.9	1.9	2.0	1.8	1.4	1.0	1.0
25	0.9	1.0	1.5	2.0	2.1	2.0	2.2	2.1	2.0	1.9	1.5	1.4	1.1
26	1.7	1.8	1.8	1.9	2.0	2.0	2.0	2.2	1.9	1.8	1.5	1.8	0.9
27	1.0	1.7	1.8	1.9	1.9	1.8	2.0	2.0	1.8	1.9	1.7	1.7	0.9
28	0.9	1.0	1.4	1.8	1.9	1.8	1.9	2.0	2.0	1.8	1.8	1.4	1.0
29	0.9	1.8	1.9	2.0	1.8	2.0	2.0	2.0	1.9	1.7	1.4	1.0	1.0
30	0.9	1.4	1.8	2.0	2.4	2.1	2.3	2.2	2.2	2.0	1.4	1.3	1.0
31													
MEAN*	1.0	1.3	1.6	1.9	2.1	2.1	2.1	2.1	2.0	1.8	1.4	1.1	0.9

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2.0	2.7	3.2	3.5	3.7	3.7	3.9	4.3	p4.2	3.5	3.3	2.7	1.1
2	1.7	2.7	3.5	3.8	p3.8c	p3.9c	4.0	3.8	3.4	3.3	2.7	2.2	1.2
3	2.2	2.7	3.2	3.4	3.9	3.8	3.8	3.8	3.4	3.3	2.8	2.3	1.2
4	2.2	3.1	3.3	3.8	3.8	3.8	3.9	3.9	3.6	3.2	2.8	2.3	1.1
5	2.2	2.3	3.1	3.5	3.9	3.7	3.7	3.7	3.5	3.4	p2.8c	[illegible]	1.1
6	2.1	2.7	3.1	3.4	3.6	3.8	3.7	3.6	3.4	3.2	2.7	2.2	1.1
7	2.4	2.3	3.2	3.4	3.8	3.7	3.8	3.5	3.4	3.3	2.8	2.2	1.5
8	[illegible]	2.8	3.0	3.4	3.6	3.6	3.8	3.3	3.6	3.3	2.8	2.3	1.2
9	2.2	2.7	3.3	3.4	3.8	p3.7c	3.6	3.6	3.4	3.1	2.7	2.2	1.2
10	[illegible]	[illegible]	3.1	3.4	3.5	3.6	3.7	p3.9a	p3.1a	3.4	2.8	2.5	1.1
11	[illegible]	2.7	3.1	3.4	3.5	3.6	[illegible]	[illegible]	[illegible]	[illegible]	2.9	[illegible]	1.7
12	2.2	2.7	3.2	3.2	[illegible]	3.1	3.7	3.5	2.9	2.9	2.6	[illegible]	1.4
13	2.2	2.7	3.0	3.4	[illegible]	3.7	3.6	3.5	3.4	3.1	2.3	2.1	1.2
14	2.2	2.7	3.1	3.5	3.5	4.1	3.6	3.6	3.4	3.1	2.8	2.3	1.0
15	2.2	2.8	3.1	3.4	3.6	3.7	3.6	3.5	3.4	3.1	2.7	2.2	1.1
16	2.1	2.5	3.3	3.4	3.3	3.6	3.8	3.6	3.4	3.1	2.7	2.2	1.2
17	2.0	2.2	2.9	3.4	3.4	3.4	3.5	3.4	3.9	3.4	2.8	2.3	1.2
18	2.3	2.7	p3.0	3.4	3.5	3.6	3.6	3.7	3.5	3.6	3.0	3.5	1.4
19	2.2	2.7	3.1	3.4	3.5	3.6	3.5	3.7	3.4	3.1	2.8	2.3	1.4
20	1.2	2.3	2.9	3.4	3.5	4.1	3.7	3.1	3.7	3.5	2.3	2.5	1.5
21	2.2	3.0	3.1	3.4	3.5	3.7	3.6	3.6	3.6	3.4	2.7	2.4	1.4a
22	2.2	2.7	3.1	3.8	3.3	3.9	4.0	3.7	3.5a	3.1	2.6	2.2	[illegible]
23	2.2	2.3	3.0	3.4	3.6	3.7	3.8	3.8	3.4	3.4	2.8	2.4	1.5
24	2.2	2.7	3.0	3.4	3.6	3.6	3.7	3.6	3.4	3.4	2.9	2.4	1.6
25	2.2	2.6	3.1	3.5	3.7	3.8	3.8	3.6	3.6	3.5	3.6	2.4	1.6
26	2.2	2.8	3.3	3.5	[illegible]	3.8	3.8	3.8	3.6	3.0	2.8	2.5	1.7
27	2.3	3.0	3.2	3.6	3.6	3.8	3.8	3.6	3.6	3.4	2.9	2.5	1.8
28	2.2	2.7	3.1	3.5	3.6	3.8	3.8	3.8	3.5	3.3	2.8	2.4	1.6
29	2.2	2.8	3.1	3.5	3.6	3.6	3.8	3.6	3.5	3.4	2.5	[illegible]	1.7
30	p2.0a	2.7	3.4	3.8	4.0	3.9	4.0	3.8	3.7	3.5	2.8	2.4	1.3
31													
MEAN*	2.1	2.7	3.1	3.5	3.6	3.7	3.7	3.7	3.5	3.3	2.8	2.4	1.4

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 239

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1942 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND DECEMBER 1942

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.2	6.0	5.5	4.8	4.4	3.9	6.9	8.8	10.1	11.0	10.7	11.0	11.0	11.2	11.3	10.5	10.4	9.3	9.3	8.9	8.7	8.2	6.9	p6.5f	8.4
2	p6.3f	4.3	4.0	4.0	3.8	2.5	6.1	8.3	9.3	10.4	11.0	11.0	11.1	11.1	10.9	10.9	10.5	9.7	8.5	8.5	8.3	8.1	9.5	9.1	8.2
3	7.0	5.0	4.0	3.8	3.4	3.8	6.8	8.3	9.3	10.0	10.8	11.7	11.0	10.8	10.5	10.7	9.9	8.8	8.1	7.3	7.4	8.1	6.7	5.5	7.9
4	...f	...f	...f	...c	...c	...c	...c	...c	...c	...c	...c	10.6	10.8	10.8	10.8	10.3	p9.4c	8.8	8.2	8.5	8.2	6.7	...f	...f	...
5	...f	...f	...f	...f	...f	p3.3f	6.4	8.6	9.6	10.0	10.2	10.5	p11.4c	11.7	p11.8c	12.0	p11.9c	11.2	10.4	9.3	p6.9f	p4.6f	6.4	6.6	...
6	p6.7f	...f	...f	...f	...f	p2.5f	6.2	7.8	9.3	9.8	9.3	8.5	8.3	8.0	7.8	7.9	8.6	8.5	8.7	8.8	7.8	7.3	6.5	6.3	...
7	6.0	4.6	3.8	3.5	3.9	3.7	6.5	6.0	8.8	9.6	9.8	9.7	10.3	9.2	9.7	11.1	11.2	11.2	10.7	10.3	9.7	7.1	5.0	4.3	7.8
8	3.4	2.8	p2.7f	p2.6f	p2.8f	2.9	6.3	7.8	8.6	9.2	9.3	8.7	9.1	10.1	10.3	9.9	10.6	9.5	9.2	9.3	9.5	9.1	8.8	8.4	7.5
9	7.7	6.9	5.7	p5.6f	p4.8f	p3.9f	6.5	8.7	9.6	9.3	9.0	8.7	9.3	10.0	10.8	10.6	11.7	p12.4c	11.0	9.5	p8.3f	p7.5f	8.7	7.6	8.5
10	7.3	6.5	p4.5f	p4.5f	p4.0f	p2.4f	6.0	7.6	8.9	9.8	10.4	10.2	9.8	10.2	10.8	p11.7c	p11.6c	11.3	10.6	10.2	9.2	7.5	p5.0f	p4.7f	8.1
11	p4.9f	p3.2f	2.8	p2.8f	p2.7f	2.3	5.6	7.9	8.7	p9.6	9.8	9.6	9.5	9.2	p9.7c	10.0	p10.4c	10.4	10.1	9.1	5.0	p5.0f	4.8	4.7	7.0
12	4.3	3.7	3.6	3.7	3.9	2.9	5.6	7.3	8.3	9.2	9.9	10.5	9.7	9.2	8.9	9.9	10.5	10.2	9.9	9.3	8.1	5.8	4.4	3.3	7.2
13	p4.3f	p3.7f	p3.2f	1.9	2.0	2.5	5.5	7.3	8.0	8.3	8.3	8.4	8.7	9.1	10.4	10.6	10.2	10.0	9.4	10.0	9.1	7.5	...f	...f	...
14	...f	...f	...f	...f	...f	3.1	5.7	7.4	8.9	9.1	9.3	9.4	9.6	9.1	9.5	10.1	9.9	p9.2c	p8.9c	p7.9c	...f	...f	...f	...b	...
15	...b	3.7	p4.2f	p3.5f	p3.5f	3.5	5.1	6.9	7.4	7.4	7.3	8.0	8.4	9.2	p9.2c	8.2	8.6	p9.0c	p9.4c	p9.8c	8.2	7.6	7.3	4.9	...
16	4.2	p3.6f	p3.3f	p2.8f	p2.4f	2.6	5.1	7.1	8.5	9.2	9.5	10.0	10.7	10.4	9.8	p9.8	9.7	9.5	9.3	9.5	7.7	6.6	5.5	4.5	7.1
17	3.3	...f	...f	...c	...c	p2.9c	p5.1c	7.1	8.2	8.3	8.5	9.2	9.1	9.0	9.0	9.5	10.1	10.1	9.9	9.5	8.4	7.5	6.5	...f	...
18	...f	...f	...f	...f	...f	p2.9f	5.1	6.5	8.2	8.8	8.9	9.1	10.0	10.3	10.0	10.5	10.7	10.3	9.9	8.8	7.3	6.2	5.1	4.8	...
19	p4.0f	3.2	2.5	2.1	1.9	2.4	5.3	7.4	8.3	8.5	8.5	9.3	10.8	10.8	10.3	11.0	11.2	10.6	10.6	9.9	7.7	5.6	4.7	3.2	7.1
20	3.0	2.4	p2.3b	p2.3b	p2.2b	2.2	5.1	6.8	7.9	8.1	7.5	7.7	7.7	7.8	8.2	9.0	9.8	9.8	9.5	9.5	8.8	7.7	6.2	...f	...
21	...f	...f	...f	...f	...f	2.2	5.4	7.3	7.8	8.8	9.7	10.3	9.7	9.3	9.5	10.6	11.0	10.8	10.6	10.3	9.5	6.8	...f	...f	...
22	...f	...f	...f	p4.2f	p4.0f	p2.1f	5.3	7.5	9.3	8.8	8.2	8.3	8.8	9.5	10.1	10.7	11.3	10.5	9.8	8.4	7.2	5.3	p5.0c	p4.1c	...
23	p3.2f	2.3	p2.2b	p2.2b	2.1	2.6	6.0	7.9	9.5	10.3	10.5	10.5	10.7	10.7	10.3	10.1	10.8	10.9	10.8	10.2	8.8	7.7	6.7	6.7	7.7
24	...f	...f	...f	...f	...f	2.5	6.4	6.5	9.0	10.0	10.5	10.6	9.7	10.1	10.4	10.7	11.1	10.9	10.9	10.5	9.8	p8.2f	p4.9f	...f	...
25	...f	...f	...f	...f	p2.1f	2.3	6.3	7.4	9.2	8.7	7.8	7.8	8.0	8.3	8.9	9.5	10.8	10.1	9.7	10.0	8.9	6.7	7.0	...f	...
26	...f	...f	...f	...f	...f	p2.8f	p5.6c	8.0	9.6	10.0	10.0	10.5	10.2	10.2	11.1	11.4	11.3	11.2	11.1	9.6	9.5	7.9	6.7	...f	...
27	...f	...f	...f	...f	...f	2.0	5.9	8.5	9.0	9.0	9.4	9.4	9.0	9.2	9.3	9.8	10.3	10.4	11.3	9.0	8.7	7.4	5.6	4.8	...
28	4.3	3.1	2.6	2.5	p2.6f	3.0	5.6	7.8	8.6	9.6	9.6	8.8	8.2	8.3	8.6	9.0	p9.6c	10.0	10.4	10.7	8.7	8.2	...f	...c	...
29	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.4	9.1	8.2	7.4	7.1	7.6	8.4	8.6	9.2	9.5	9.3	8.1	7.4	7.0	p7.0f	...
30	5.4	4.8	4.2	p3.7f	p3.3f	p2.8f	5.0	7.2	8.4	8.8	9.2	9.0	8.9	8.9	9.8	10.5	10.4	10.2	10.2	9.9	p8.2f	p6.5f	p4.8f	p4.5f	7.3
31	p4.3f	p4.1f	p3.8f	3.5	3.2	p2.5f	4.9	7.6	9.0	8.5	8.8	8.6	7.6	7.5	7.7	8.0	8.3	8.1	8.2	7.4	p7.4f	p7.1f	p6.8f	p6.5f	6.6
MEAN*	5.1	4.1	3.6	3.4	3.2	2.8	5.8	7.7	8.8	9.2	9.4	9.5	9.5	9.6	9.8	10.1	10.3	10.1	9.8	9.3	8.3	7.1	6.2	5.6	7.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 240

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1942 DECEMBER 1942

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	260	270	270	280	240	250	240	260	280	320	330	350	370	360	330	330	300	260	270	270	280	300	330	320	295
2	310	350	360	350	200	290	200	270	320	310	330	330	330	350	320	340	300	220	260	310	310	300	290	260	300
3	260	240	230	240	240	240	240	250	300	320	340	360	350	350	360	340	330	260	280	320	310	410	380	360	305
4	350	280	230	...c	...c	...c	...c	...c	...c	...c	...c	340	340	350	370	370	350	250	270	270	310	360	410	340	...
5	280	290	260	240	270	260	240	280	300	340	360	360	q320	340	q350	360	330	230	290	310	330	350	350	310	306
6	290	210	300	300	370	290	240	300	320	350	360	390	370	370	340	390	350	250	270	250	240	310	320	270	310
7	250	250	270	290	260	240	240	280	300	320	350	380	360	380	360	330	300	260	280	290	250	260	280	300	295
8	320	340	340	310	260	260	240	270	300	350	380	390	330	360	350	360	320	260	270	250	260	250	240	260	303
9	320	320	330	310	280	270	240	270	300	330	350	350	330	320	380	350	330	q270c	280	320	270	270	310	280	308
10	280	290	320	340	380	300	250	280	310	360	360	350	350	370	350	q340	330	240	270	290	290	360	370	350	322
11	340	330	350	410	370	290	260	290	300	q340	380	360	370	370	q370	350	q300c	250	270	320	310	300	350	330	330
12	290	270	230	240	220	260	250	280	320	310	340	350	390	380	350	350	300	360	270	280	280	340	350	340	306
13	350	300	320	270	250	250	240	270	320	340	380	400	380	370	370	320	330	260	250	250	250	310	340	400	313
14	390	320	330	330	260	240	240	300	320	350	350	390	380	370	380	380	330	q260c	q230c	q290c	q290c	360	380	q440b	330
15	q430	370	q320f	q310f	q290f	300	240	320	320	360	370	340	390	400	q380c	380	350	q320c	q280c	q280c	220	320	320	320	330
16	360	350	340	330	310	320	250	280	300	320	340	350	350	350	330	320	320	310	240	230	250	240	250	320	307
17	350	q370f	q410f	q330c	q290c	q250c	q250c	280	310	350	370	370	390	390	370	350	320	310	250	240	260	270	320	370	324
18	390	340	320	290	240	290	250	290	300	300	330	370	350	350	370	350	330	320	250	240	240	260	300	320	308
19	340	300	300	260	260	270	250	280	320	250	380	370	350	350	380	350	340	320	260	240	300	290	360	350	311
20	370	380	q410b	q340b	q320b	300	260	310	330	360	380	420	390	410	390	350	320	320	260	270	270	270	380	420	343
21	490	440	400	380	350	320	350	300	330	320	360	370	380	370	380	320	290	250	260	290	320	440	490	450	360
22	400	430	410	350	280	q310	270	290	330	330	380	370	350	340	320	320	300	280	250	230	230	250	q340c	q320c	320
23	q320f	290	q290b	q280b	270	290	250	290	300	320	350	350	380	340	360	320	330	270	280	280	310	350	340	350	313
24	350	380	350	340	230	300	260	280	300	310	380	340	350	360	340	340	340	250	260	260	300	350	q460f	460	329
25	420	440	390	280	240	300	250	320	300	370	370	380	380	q380	360	360	330	270	270	260	300	360	360	320	334
26	380	420	430	450	400	290	q300c	320	300	360	310	360	350	340	330	330	350	220	270	260	290	320	350	380	338
27	360	350	340	340	340	310	250	260	300	360	370	400	410	370	370	330	310	390	250	280	280	290	310	310	328
28	280	260	270	290	280	260	250	260	320	330	340	410	370	360	340	360	q320c	230	290	290	320	300	310	...c	...
29	...c	...c	...c	...c	...c	...c	...c	...c	...c	390	360	400	400	400	380	350	330	250	260	280	340	290	300	270	...
30	240	240	270	270	270	q280	250	280	310	321	350	370	380	380	360	330	330	310	270	280	320	370	300	340	309
31	260	250	250	250	250	280	250	290	300	200	360	350	420	410	390	340	300	350	270	270	330	290	280	250	300
MEAN*	334	319	321	310	283	280	252	284	309	330	357	368	366	366	359	345	323	277	265	274	286	314	338	337	317

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 241

DECEMBER 1942

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1942

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.3	4.5	4.8	4.8	4.8	4.9	4.8	4.6	4.5	4.4	...	...
2	...	p4.5	4.8	4.8	4.9	4.9	5.0	4.8	4.8	4.8	4.5	...	...
3	...	4.3	4.7	4.7	4.8	4.8	4.9	4.9	4.9	4.7	4.6	...	...
4	...	...c	...c	...c	...c	4.8	4.8	4.9	4.7	4.7	p4.5c	...	...
5	...	4.8	4.7	4.9	5.1	5.0	p4.8	4.8	p4.7	4.7	4.6	...	...
6	...	4.7	4.6	4.7	4.9	4.9	4.8	4.7	4.5	4.7	4.5	...	...
7	...	4.2	4.6	4.5	4.6	4.7	4.8	4.8	4.6	p4.8c	4.6	...	...
8	...	4.4	4.4	4.7	4.8	4.6	4.7	4.7	4.5	5.0	4.5	...	...
9	...	4.5	4.6	4.7	4.7	4.8	4.6	4.5	4.4	4.5	4.5	...	...
10	...	4.4	4.5	4.8	4.8	4.7	4.7	4.8	4.8	4.5	4.5	...	...
11	...	4.5	4.5	p4.7	4.6	4.7	4.7	4.8	p4.7	4.4	p4.5c	...	...
12	...	4.5	4.6	4.5	4.5	4.7	4.8	4.6	4.5	4.6	4.4	...	...
13	...	4.4	4.5	4.5	4.8	4.7	4.7	4.6	4.5	4.2	4.4	...	...
14	...	4.5	4.7	4.5	4.6	4.7	4.5	4.7	4.6	4.5	4.3	...	...
15	...	4.4	4.4	4.6	4.7	4.7	4.7	4.7	p4.5c	4.5	4.5	...	...
16	...	4.1	4.5	4.4	4.5	4.6	4.6	4.6	4.6	4.5	4.5	...	...
17	...	4.4	4.5	4.7	4.6	4.6	4.6	4.6	4.5	4.5	4.3	...	...
18	...	4.4	4.4	4.4	4.5	4.6	4.6	4.6	4.7	4.5	4.6	4.3	...
19	...	4.3	4.4	4.7	4.6	4.6	4.6	4.5	4.7	4.5	4.4	4.3	...
20	...	4.5	4.4	4.6	4.7	4.7	4.8	4.8	4.6	4.4	4.2	4.4	...
21	...	4.3	4.5	4.4	4.7	4.6	4.8	4.8	4.7	4.5	4.2	...	...
22	...	4.3	4.4	4.8	4.6	4.7	4.8	4.8	4.6	4.5	4.5	4.1	...
23	...	4.4	4.5	4.7	4.8	4.8	4.7	4.8	4.8	4.3	4.4	...	...
24	...	4.4	4.5	4.7	4.6	4.7	4.7	4.8	4.7	4.5	4.5	...	...
25	...	p5.2	4.5	4.6	4.7	4.9	4.8	4.7	4.7	4.7	4.5	...	...
26	...	4.4	4.4	4.3	4.6	4.8	4.8	4.6	4.6	4.5	p4.6c	...	...
27	...	4.3	4.6	4.6	4.7	4.9	4.9	4.6	4.6	4.4	4.4	4.2	...
28	...	4.4	4.6	4.7	4.6	4.7	4.7	4.6	4.7	4.8	p4.4c	4.1	...
29	...	p4.4c	p4.6c	4.8	4.6	4.8	4.7	4.6	4.6	4.4	4.5	...	...
30	...	4.3	4.5	4.7	4.7	4.6	4.8	4.6	4.7	4.3	4.4	4.4	...
31	...	4.3	4.5	4.5	4.7	4.6	4.8	4.7	4.5	4.5	4.1	4.4	...
* MEAN	...	4.4	4.5	4.6	4.7	4.7	4.8	4.7	4.6	4.6	4.4	4.3	...

MINIMUM VIRTUAL HEIGHT OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	220	220	210	200	200	210	200	200	200	200	...	...
2	...	p220a	220	210	210	210	190	180	205	230	210	...	...
3	...	215	200	200	200	210	200	210	210	210	210	...	...
4	...	...c	...c	...c	...c	190	210	200	200	210	p200c	...	...
5	...	230	210	200	p240	p210	p220	200	p200	220	220	...	...
6	...	230	220	210	210	200	210	200	200	190	190	...	...
7	...	210	210	220	200	200	200	190	210	p150c	220	...	...
8	...	220	210	210	210	200	200	200	210	210	205	...	...
9	...	210	210	220	200	220	210	200	200	200	200	...	...
10	...	240	210	200	210	210	200	200	210	210	220	...	...
11	230	230	210	p210	210	200	200	190	p200	190	p210c	...	...
12	...	230	240	220	200	210	205	200	210	210	210	...	...
13	...	220	190	200	190	200	200	210	205	200	200	...	...
14	...	230	205	220	210	200	200	200	200	210	200	...	...
15	...	220	210	200	200	200	200	210	p190	200	200	...	...
16	...	230	210	210	210	210	200	210	200	p220	240	...	...
17	...	210	220	220	200	200	p160	190	200	200	p160	...	...
18	...	230	210	220	200	p150	p150	200	p130	200	210	240	...
19	...	230	200	200	200	200	200	190	200	210	210	240	...
20	...	220	210	220	200	190	190	200	210	210	220	250	...
21	...	240	220	210	210	210	200	200	200	210	220	...	...
22	...	230	220	220	200	210	205	210	200	210	230	240	...
23	...	240	220	220	220	220	210	210	210	230	220	...	...
24	...	240	230	210	210	210	200	210	200	190	200	...	...
25	...	240	220	210	200	200	200	200	180	200	200	...	...
26	...	230	210	200	200	200	200	200	180	210	230	...	...
27	...	230	200	200	200	200	200	200	180	200	p220c	220	...
28	...	220	220	210	200	200	190	190	200	230	210	210	...
29	...	p220c	p210c	210	200	220	200	190	190	200	p170c	...	...
30	...	210	200	220	p170	p170	200	210	190	210	200	230	...
31	...	220	200	200	180	190	200	200	200	200	190	240	...
* MEAN	230	225	212	210	203	201	199	200	197	205	207	234	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 242

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1942 DECEMBER 1942

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.9	1.7	1.8	1.9	1.9	2.0	2.0	2.2	2.0	1.8	1.3	1.2	0.9	2.4	3.0	3.5	3.6	3.7	4.0	3.9	4.0	3.5	3.5	2.9	2.5	1.2
2	0.8	1.1	1.3	1.9	2.0	1.9	2.2	2.0	2.0	1.8	1.4	1.3	0.8	2.0	1.7	3.1	3.6	3.8	4.2	4.2	3.8	4.0	3.7	2.9	2.2	1.4
3	0.9	1.0	1.6	1.7	1.2	1.9	2.0	2.0	1.8	1.4	1.4	1.4	1.0	2.4	2.8	3.2	3.5	3.8	4.0	3.8	3.8	3.5	3.3	3.0	2.7	1.6
4	...c	...c	...c	...c	...c	2.7	2.0	1.9	2.0	1.4	p1.1	1.6	1.2	...c	...c	...c	...c	...c	3.8	4.0	3.8	3.8	3.3	p2.8	2.4	1.4
5	1.0	1.5	1.7	1.4	1.8	1.9	2.0	1.8	2.0	1.7	1.4	1.0	1.0	2.3	2.7	3.3	3.5	p4.3	p4.3	p4.4	4.0	p3.8	3.5	2.9	2.4	1.4
6	0.8	1.1	1.6	1.8	1.7	1.8	1.9	1.8	1.8	1.5	1.2	1.0	0.9	2.0	2.4	3.4	3.5	3.7	3.7	3.7	3.6	3.5	3.2	2.8	2.4	1.5
7	1.0	1.5	1.7	1.8	2.0	1.9	2.0	1.9	1.9	1.8	1.7	1.0	1.0	2.2	2.8	3.2	3.4	3.6	3.7	3.6	3.7	p3.7	3.1	4.0	2.4	1.9
8	0.8	0.9	2.0	1.4	1.8	1.8	1.9	1.9	1.9	1.4	1.0	1.0	0.8	2.0	2.7	3.1	3.3	3.6	3.6	3.6	3.6	3.4	3.2	2.8	3.0	1.6
9	1.1	1.0	1.0	1.4	2.0	2.1	2.2	2.2	1.8	1.4	1.3	1.0	0.8	3.1	2.7	3.1	3.4	3.5	4.0	3.6	3.6	3.5	3.2	2.9	2.6	1.4
10	0.6	0.8	1.0	1.4	1.8	2.0	2.0	2.2	1.4	1.4	1.0	1.0	1.0	2.0	2.8	3.1	3.4	3.6	3.6	3.6	3.6	3.4	3.4	2.9	2.5	1.4
11	0.6	1.0	1.3	p1.8	1.8	1.7	1.8	1.8	p1.6	1.3	p1.2c	1.0	0.6	2.2	2.8	3.2	p3.4	3.6	3.5	3.6	3.5	p3.7	3.2	p2.8c	2.4	1.3
12	0.8	1.0	1.4	1.4	1.4	1.8	1.9	1.4	1.8	1.0	1.2	1.0	0.8	1.4	2.6	3.1	3.4	3.5	3.6	3.6	3.6	3.4	2.2	2.8	2.2	1.9
13	0.9	1.0	1.0	1.1	1.9	1.9	1.8	1.9	1.8	1.2	1.0	1.0	1.0	2.2	2.8	2.9	2.2	3.0	3.6	3.7	3.5	3.3	3.0	2.7	2.0	1.5
14	0.7	1.0	1.0	1.0	1.9	p1.2	2.0	p1.4	1.2	1.6	p0.8c	p0.7c	p1.0c	1.1	2.8	3.0	3.6	3.5	3.6	3.6	3.5	3.4	3.0	p3.2	p2.8	p1.9
15	0.9	1.0	p1.8	p1.6	p1.6	p1.6	p2.8	p2.2	p1.7	1.8	p1.4c	p1.2c	p1.0c	1.9	2.7	2.9	3.4	3.4	3.6	3.6	4.0	3.4	2.7	p3.0c	p2.8c	p2.3c
16	0.6	0.8	1.1	1.3	1.4	2.1	2.2	1.7	1.6	p1.7	1.0	0.8	1.6	2.0	2.5	3.2	3.4	3.5	3.8	3.7	3.7	3.8	p3.6	3.1	2.0	1.7
17	0.6	1.0	1.1	1.0	1.4	1.7	1.9	1.8	1.4	1.2	1.0	0.9	0.8	2.0	2.8	2.3	3.7	3.6	3.5	p3.6	3.5	3.4	3.4	p2.8	2.2	1.5
18	0.8	1.1	1.8	1.7	1.7	1.8	1.9	1.8	1.9	1.8	1.1	0.8	0.6	2.0	2.8	3.0	3.4	2.5	3.6	3.7	3.7	3.5	3.4	2.8	2.5	1.6
19	0.9	1.2	1.2	1.1	1.8	1.8	1.9	1.9	1.4	1.4	1.1	0.8	0.8	2.2	2.8	3.1	3.4	3.0	3.6	3.7	3.9	3.9	3.6	3.0	2.2	1.4
20	0.9	1.0	1.0	1.2	1.7	1.8	1.8	1.8	1.7	1.7	1.8	1.2	0.9	2.2	2.7	3.1	3.4	3.6	3.7	3.7	3.7	3.5	3.4	3.0	2.4	1.4
21	0.8	0.9	1.0	1.7	1.3	1.8	1.7	1.7	1.7	1.2	1.1	0.8	0.7	1.9	2.6	2.9	3.4	3.5	3.6	3.6	3.5	3.5	3.4	3.0	3.5	1.7
22	0.8	0.8	1.0	1.2	1.8	1.9	1.9	1.8	2.0	1.8	1.8	1.2	0.9	1.8	2.5	3.0	3.4	3.6	3.7	3.7	3.7	3.5	3.5	3.0	2.5	1.6
23	0.9	1.6	1.2	1.2	1.7	1.7	1.8	1.8	1.4	1.4	1.1	1.0	0.8	2.0	2.7	3.1	3.4	3.6	3.8	3.8	3.7	3.5	3.5	3.0	2.4	1.2
24	0.8	1.0	1.1	1.2	1.2	1.8	1.8	1.7	1.8	1.8	1.2	1.2	0.9	2.1	2.8	3.1	3.5	3.6	3.6	3.6	3.8	3.6	3.2	2.9	2.6	1.8
25	0.8	0.8	1.1	1.3	p1.2	p1.2	1.6	2.1	1.8	1.4	1.1	0.8	1.0	2.0	2.6	3.0	3.4	3.6	3.6	3.8	3.6	3.4	3.4	3.0	2.6	1.8
26	p1.2c	1.2	1.4	1.8	2.2	2.0	2.0	2.0	1.9	1.8	1.6	0.9	1.0	p1.8c	2.6	3.0	3.4	3.6	3.8	3.7	3.6	3.5	3.4	3.4	2.6	1.4
27	0.7	1.1	1.1	1.2	1.3	1.8	1.4	1.4	1.3	1.7	1.2	1.0	0.6	2.1	2.9	3.0	3.0	3.5	3.7	3.7	3.6	3.7	3.6	3.1	2.4	2.0
28	0.8	1.0	1.2	1.2	1.8	1.8	1.8	1.9	1.9	1.8	p1.3	1.2	0.8	2.2	2.4	3.1	3.4	3.5	3.7	3.7	3.7	3.5	3.7	p3.1	2.5	1.2
29	...c	...c	...c	1.4	1.8	1.9	1.8	1.8	1.8	1.2	1.1	0.8	1.0	...c	...c	...c	3.4	3.7	3.8	3.7	3.6	3.6	3.2	2.8	2.6	1.8
30	1.0	1.2	1.2	1.4	1.8	2.0	2.0	2.0	1.9	1.2	1.1	1.2	1.1	2.0	2.8	3.0	3.6	3.6	3.7	3.7	3.7	3.5	3.7	3.0	2.6	1.7
31	1.0	1.2	1.2	1.4	1.8	1.8	1.8	2.0	1.8	1.2	1.2	0.8	0.9	2.0	2.8	3.2	3.5	3.6	3.7	3.7	3.7	3.0	3.4	3.0	2.7	1.7
* MEAN	0.9	1.1	1.3	1.4	1.7	1.8	1.9	1.9	1.8	1.5	1.2	1.0	0.9	2.1	2.7	3.1	3.4	3.5	3.7	3.7	3.7	3.5	3.3	3.0	2.5	1.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 243

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1943 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND JANUARY 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.6	4.5	4.1	4.0	4.3	3.9	4.8	7.2	7.8	9.1	9.3	9.5	9.0	8.0	8.0	8.8	9.9	9.6	9.7	9.2	8.1	6.8	5.1	3.7	7.1
2	3.2	2.6	2.0	2.2	2.0	2.1	5.1	7.6	8.3	8.6	9.4	9.8	9.6	9.0	9.6	10.3	10.4	9.8	9.3	8.4	6.7	p6.0f	4.7	5.4	6.8
3	5.0	4.7	p4.3f	p3.5f	p2.8f	p2.0f	4.9	7.7	7.7	8.0	8.7	9.7	9.0	8.9	9.7	9.9	9.1	8.9	8.4	8.6	8.7	8.6	7.8	7.8	7.2
4	p7.2	p6.1f	p5.0f	p4.0f	p3.0f	p1.9f	4.8	6.6	7.1	7.8	8.5	9.2	8.9	8.7	9.0	9.7	9.8	9.2	9.3	p9.3	8.3	7.2	4.8	p4.3c	7.1
5	p3.8c	p3.3c	p2.8f	p2.4f	p1.9f	1.4	4.8	7.4	8.5	8.8	9.0	9.0	9.7	10.2	10.3	10.8	10.3	p9.6	p9.3	p9.6	9.5	9.1	8.5	6.5	7.4
6	p5.7f	p4.9f	p4.1f	p3.4f	p2.6f	p1.8f	p3.9	6.5	7.1	7.3	7.0	6.7	6.4	6.6	7.4	7.9	8.7	9.4	8.9	8.6	8.2	7.3	5.8	4.2	6.3
7	p3.8f	p3.4f	p3.0f	p2.6f	p2.2f	1.8	4.7	6.9	8.9	8.8	8.8	8.6	8.0	7.8	8.3	9.6	10.2	9.6	9.4	7.5	5.5	4.1	3.6	3.8	6.3
8	3.0	2.4	1.8	1.3	1.3	1.2	4.3	7.0	8.5	8.6	8.9	8.7	8.4	8.8	10.1	10.9	10.3	9.8	9.6	9.5	8.2	5.8	4.7	4.3	6.6
9	3.2	2.2	1.8	p1.7c	p1.6c	p1.5c	p3.9c	p6.2c	7.7	8.0	8.5	8.5	8.0	7.8	8.7	9.3	9.5	9.7	9.7	9.7	9.1	8.0	7.3	7.0	6.6
10	5.8	p5.1f	p4.4f	p3.7f	p3.1f	2.4	5.1	7.0	7.6	8.1	8.1	7.7	6.9	6.2	6.6	p7.8	8.0	8.0	8.0	7.2	5.5	4.6	3.4	3.0	6.0
11	2.5	1.9	p1.6b	1.3	1.4	1.5	4.8	6.6	7.1	7.7	8.7	9.2	8.4	7.1	8.0	8.4	9.1	8.4	8.3	7.6	5.7	3.5	p2.8b	p2.5	5.6
12	...f	...f	...f	...f	...f	...f	4.7	6.7	7.2	7.6	8.5	8.7	8.2	7.6	8.2	8.4	8.2	8.5	8.9	8.5	7.6	6.4	5.8	5.0	...
13	4.4	3.1	1.9	1.8	p1.5b	1.2	4.6	6.9	7.6	7.3	7.7	8.6	8.4	8.6	9.7	10.2	9.5	9.1	9.1	9.2	8.7	6.8	p6.5f	p6.0f	6.6
14	5.8	p4.5f	p4.0f	p3.2f	p2.4f	p1.6f	4.5	6.5	7.8	7.6	8.5	8.3	7.8	8.5	8.8	9.0	9.7	9.6	9.5	8.5	p6.9f	p5.5f	p5.0f	p4.4f	6.6
15	p3.8f	3.2	2.1	p1.4b	p1.5b	p1.6b	4.6	6.5	7.5	7.9	8.2	8.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
16	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	p8.5c	8.5	9.3	9.3	10.0	10.3	10.3	9.7	6.9	6.7	...f	...f	...f	...f	...
17	p4.6f	p4.2f	p3.8f	p3.5f	p3.5f	p3.0f	5.5	6.2	6.6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
18	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.3	8.7	9.5	9.6	9.2	9.2	9.3	9.0	9.3	8.9	8.5	7.1	6.1	p6.0f	p5.8f	...
19	p5.6f	p5.4f	p4.3f	3.3	2.8	2.5	4.8	6.9	8.4	8.7	8.5	8.7	9.2	8.4	8.5	8.6	8.8	9.2	9.6	9.7	8.4	7.4	7.2	6.6	7.1
20	5.1	3.8	2.9	2.4	2.1	1.6	4.5	7.6	8.0	9.7	9.5	9.3	9.2	9.0	7.6	7.8	8.4	8.6	10.1	9.4	8.9	8.4	8.0	7.0	7.0
21	6.7	4.9	4.3	3.9	3.8	3.4	5.1	7.7	8.5	9.6	10.3	11.0	10.8	11.6	11.6	10.9	10.7	11.2	11.0	10.3	p9.6f	p8.9f	p8.1f	7.4	8.4
22	6.0	4.0	2.5	p1.4b	p1.3b	p1.2b	4.7	6.8	8.1	7.5	7.6	7.4	7.1	p7.1	7.2	8.0	8.6	8.9	9.7	9.1	7.6	6.8	6.6	6.4	6.3
23	4.1	3.1	2.5	2.7	2.3	1.4	4.5	7.0	8.5	7.9	6.8	6.6	7.4	8.2	8.3	9.0	9.2	9.0	8.8	8.6	7.3	6.6	...c	...c	...
24	...c	...c	...c	...c	...c	...c	5.2	6.6	8.0	7.6	6.8	6.2	6.6	6.5	6.6	7.7	8.4	8.7	8.7	8.3	p7.4f	p6.5f	p5.6f	p5.6f	...
25	p5.5f	p4.4f	4.0	3.8	3.2	1.9	4.6	7.0	8.5	9.0	8.3	6.6	6.8	7.3	p7.5	7.5	7.8	p8.0c	8.3	8.2	8.0	p7.3f	p5.6f	p5.5f	6.4
26	5.4	4.1	3.1	2.7	p2.1b	p1.5b	4.5	7.5	p8.2c	8.9	6.4	6.5	7.0	8.0	8.4	8.8	8.7	8.3	8.4	p7.0c	p5.7c	4.3f	p5.6	3.9	6.0
27	p3.5f	p3.1f	p2.8f	2.4	2.2	2.1	4.7	6.7	7.7	7.9	7.3	6.7	6.6	p6.8c	7.1	7.8	8.0	8.3	9.0	8.8	7.9	6.7	6.0	5.5	6.1
28	4.7	4.4	4.0	3.4	p2.6b	p2.0b	4.2	6.9	6.7	7.6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	6.8	...
29	5.6	3.6	3.0	2.5	2.1	1.8	4.5	6.4	7.2	7.8	p8.2c	8.7	6.8	6.7	p6.9c	p7.0c	7.2	7.8	8.5	8.4	7.3	p6.9f	p6.6f	p6.3f	6.2
30	5.9	5.4	3.7	2.3b	1.6b	p1.5b	4.0	5.8	7.2	7.9	7.8	8.4	8.9	9.6	9.5	8.0	7.0	6.7	p6.8c	6.9	5.3	3.7	p3.6f	p3.6f	5.8
31	p3.5f	p3.4f	3.4f	p3.3f	3.3	2.7	4.4	6.5	7.8	p8.0c	8.1	8.5	9.3	9.8	9.7	9.2	9.0	8.6	8.5	8.2	7.3	p7.0a	6.8	6.8	6.8
MEAN*	4.8	3.9	3.2	2.7	2.4	1.9	4.6	6.8	7.8	8.2	8.3	8.4	8.3	8.3	8.6	9.0	9.1	9.0	9.0	8.6	7.6	6.5	5.8	5.4	6.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 244

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1943 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JANUARY 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	230	230	240	250	250	240	270	300	320	350	380	420	420	370	330	330	300	245	230	240	240	220	230	286
2	230	230	250	260	270	290	250	280	290	300	345	360	370	390	385	370	350	250	270	290	300	330	330	280	303
3	240	250	310	320	310	360	250	270	290	320	340	350	380	400	390	330	320	330	270	250	250	250	250	290	305
4	290	300	280	310	320	290	240	260	280	290	305	360	390	370	370	330	310	260	260	240	300	330	420	q460c	315
5	q500c	q550c	q590c	560	460	360	260	290	290	340	340	360	370	340	330	340	340	230	250	240	270	280	300	330	355
6	330	320	270	270	290	310	270	320	330	370	410	405	460	430	410	300	330	250	260	250	250	250	330	450	328
7	440	470	560	490	350	290	250	310	305	320	380	410	390	380	370	315	305	280	250	230	240	230	240	240	335
8	250	280	250	240	240	260	260	280	300	350	360	360	395	370	330	320	330	310	270	280	250	260	290	260	296
9	250	260	250	q240c	q250c	q260c	q280c	q290e	300	320	360	370	380	410	350	350	330	320	260	250	250	260	280	280	298
10	310	330	390	380	340	270	250	270	310	320	390	420	440	460	410	q330	310	250	270	220	230	230	240	260	318
11	300	320	q390b	q370b	420	300	240	260	300	330	360	380	390	400	400	320	320	300	250	230	230	240	q300b	q370	322
12	q270f	q260f	q300f	q290f	q280f	q310f	240	270	300	350	380	380	400	410	390	350	340	310	250	240	260	260	260	260	307
13	260	270	260	290	290	390	260	280	300	330	360	360	390	390	360	360	320	330	270	240	280	340	350	300	316
14	270	270	270	270	300	300	260	290	300	340	360	380	410	370	350	340	340	310	250	280	320	370	380	320	319
15	230	250	240	q270b	q290b	q270b	250	280	320	340	380	370	...c	...c	...c	...c	...c	...c	q280c	q280c	q320c	q380c	q400c	q410c	...
16	q390c	q350c	q300c	q280c	q250c	q250c	q270c	q290c	q300c	q320c	q340c	350	360	360	350	360	360	370	260	300	330	350	390	330	325
17	290	280	250	240	310	260	250	290	300	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
18	...c	...c	...c	...c	...c	...c	...c	...c	...c	300	320	330	340	390	410	340	340	310	280	270	310	310	300	300	...
19	290	260	250	250	240	260	250	280	300	360	410	410	390	380	350	350	350	300	250	270	300	310	290	270	307
20	270	230	230	240	240	310	260	270	340	320	350	370	390	400	390	360	360	320	260	270	240	260	260	240	299
21	230	250	270	260	260	230	250	280	300	330	350	330	340	350	330	340	330	300	270	310	380	380	300	270	302
22	240	220	240	q260b	q260b	q260b	260	300	320	350	400	400	405	q400	330	330	320	300	260	260	290	280	280	270	301
23	280	290	260	250	260	270	250	290	320	300	420	400	400	360	360	340	310	290	250	250	290	310	...c	...c	...
24	...c	...c	...c	...c	...c	...c	240	290	350	360	360	440	440	400	380	340	320	300	260	310	300	340	320	290	...
25	250	240	240	230	210	250	260	290	300	320	430	430	440	390	q360	380	340	300	250	270	240	240	250	270	299
26	240	260	250	260	q250b	q250b	260	290	310	330	450	440	360	360	330	330	320	310	250	290	q330c	370	320	340	312
27	340	330	350	330	290	260	250	300	320	360	400	400	430	440	400	350	340	330	270	280	300	300	290	260	330
28	270	270	240	250	240b	q250b	250	250	300	350	q375c	q400c	q425c	q450c	q410c	q360c	q330c	q290c	270	280	310	310	300	300	312
29	250	250	250	260	270	270	240	260	280	320	380	370	420	440	q410e	q390c	360	340	260	280	330	340	330	270	315
30	240	230	230	240b	240b	q260b	270	290	280	290	330	350	390	390	380	370	370	230	q260c	280	370	440	q340f	q320f	308
31	310	280	250	240	250	250	260	300	310	360	370	340	360	340	330	370	330	320	260	290	340	320	320	290	308
MEAN*	286	287	291	289	284	281	254	283	305	330	370	380	396	393	370	345	333	298	260	265	288	304	306	302	312

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 245

JANUARY 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1943

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION													MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.2	4.3	4.6	4.6	4.6	4.8	4.6	4.5	4.4	[illegible]	4.3	...	...	230	200	[illegible]	210	200	200	200	190	210	190	230	...
2	...	4.2	4.3	4.4	4.5	4.6	4.5	4.6	4.5	4.5	4.3	...	...	...	230	220	[illegible]	200	200	190	190	180	200	200	...	...
3	...	4.2	4.5	4.5	4.6	4.5	4.5	4.5	4.5	4.3	4.4	4.3	...	...	230	230	[illegible]	210	[illegible]	200	200	200	200	200	240	...
4	...	4.1	4.3	4.4	4.5	4.5	p4.8	4.5	4.5	4.3	4.3	...	...	...	230	220	210	210	200	210	205	210	210	200	...	...
5	...	4.4	4.5	4.5	4.5	4.7	4.6	4.5	4.5	4.5	4.4	...	...	...	240	220	220	210	200	200	200	200	210	180	...	...
6	...	4.4	4.2	4.4	4.5	4.5	4.8	4.5	4.5	4.2	4.2	...	...	...	230	210	210	200	200	200	190	200	200	250	...	...
7	...	4.4	4.3	4.5	4.5	4.6	4.5	4.4	p4.4a	4.3	4.4	4.3	...	...	240	210	200	200	200	200	190	p190a	200	200	240	...
8	...	4.3	4.4	4.6	4.4	4.5	4.5	4.4	4.4	p4.4a	4.4	4.3	...	...	230	220	210	p200a	200	190	210	p200c	p200a	p210a	p230a	...
9	...	p4.3c	4.5	4.4	4.5	4.5	4.4	4.6	4.3	4.4	4.4	4.2	...	...	p230c	200	210	210	200	p200a	200	190	p200a	210	240	...
10	...	4.2	4.4	4.3	4.5	4.5	4.5	4.5	4.3	p4.3	4.1	...	...	...	230	210	210	200	200	200	185	200	p200	200	...	...
11	...	4.2	4.2	4.4	4.3	4.4	4.4	4.4	4.5	4.2	4.3	4.2	...	...	230	210	220	210	210	200	190	190	190	200	230	...
12	...	4.2	4.3	4.4	4.5	4.5	4.5	4.5	4.4	4.3	4.2	4.2	...	...	230	220	230	200	210	200	200	210	190	190	240	...
13	...	4.2	4.3	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.2	4.2	...	...	240	230	210	220	220	p210a	210	210	200	190	230	...
14	...	4.3	4.4	4.5	4.4	4.4	4.5	4.4	4.4	4.2	4.0	4.2	...	...	230	230	220	210	210	200	210	200	200	190	230	...
15	...	4.2	4.4	4.5	4.5	4.5	...c	...c	...c	...c	...c	...c	...	...	230	220	210	200	200	...c	...c	...c	...c	...c	...c	...
16	...	...c	...c	...c	4.6	4.5	4.5	4.5	4.3	4.4	4.3	4.4	...	...	...c	...c	...c	p220c	210	210	200	200	200	210	240	...
17	...	4.3	4.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...	240	220	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
18	...	p4.2c	p4.3c	4.3	4.5	4.7	4.6	4.7	4.5	4.2	4.3	4.2	...	...	p230c	p220c	210	210	200	205	200	200	200	190	250	...
19	...	4.2	4.5	4.5	4.8	4.5	4.6	4.5	4.3	4.6	4.5	4.3	...	...	230	220	220	210	200	200	210	200	205	200	240	...
20	...	4.2	4.5	4.4	4.6	4.6	4.5	4.5	4.6	4.3	4.5	4.3	...	...	230	200	220	200	200	200	200	200	205	200	240	...
21	...	4.3	4.4	4.5	4.5	4.9	4.6	4.7	4.6	4.5	4.4	4.2	...	...	240	230	230	220	200	200	200	200	190	190	240	...
22	...	4.3	4.3	4.6	4.7	4.7	4.7	p4.5	4.4	4.3	4.4	4.3	...	...	230	220	200	200	200	195	p200	190	190	240	240	...
23	...	4.4	4.5	4.3	4.6	4.6	4.6	4.5	4.4	4.4	4.5	4.2	...	...	230	200	200	210	200	200	200	190	180	180	220	...
24	...	4.2	4.6	4.5	4.5	4.6	4.6	4.5	4.4	4.5	4.5	...	...	...	230	220	220	200	200	200	200	190	p190a	p200a	210	...
25	...	4.3	4.4	4.4	4.7	4.6	4.8	4.7	p4.5	4.6	4.5	p4.3c	...	...	230	220	200	200	200	200	200	p190	190	180	250	...
26	...	4.3	4.4	4.5	4.6	4.6	4.3	4.5	4.4	4.7	4.3	4.4	...	...	230	220	210	200	200	200	190	190	210	220	250	...
27	...	4.4	4.3	4.5	4.5	4.6	4.7	4.6	4.5	4.4	4.6	4.4	...	...	[illegible]	210	210	200	200	200	200	190	190	240	250	...
28	...	p4.3c	4.6	4.5	...c	...c	...c	...c	...c	...c	...c	...c	...	...	230	220	210	200	200	200	200	200	190	190	p210c	...
29	...	.2	4.3	4.5	p4.5c	4.5	4.6	4.5	4.5	4.4	4.3	4.3	...	...	230	210	220	p210c	200	200	200	p200c	p190c	190	260	...
30	...	4.3	4.5	4.4	4.5	4.6	4.5	4.5	4.4	4.3	4.3	...	...	...	240	230	220	200	210	210	205	210	200	200	...	...
31	...	4.3	4.5	4.5	4.5	4.5	4.6	4.5	4.4	4.5	4.3	4.2	...	...	240	220	200	190	200	200	200	200	190	190	240	...
MEAN*	...	4.3	4.4	4.5	4.5	4.6	4.6	4.5	4.4	4.4	4.3	4.3	...	...	232	217	213	205	202	201	199	197	198	201	237	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 246

JANUARY 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1943

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	1.2	1.2	1.9	1.3	1.3	1.8	1.8	1.3	1.2	1.1	0.8	0.6
2	0.7	1.2	1.8	1.9	1.4	1.8	1.9	1.8	1.8	1.2	1.2	1.0	0.9
3	0.7	1.0	1.2	1.8	2.0	1.8	2.0	1.8	1.4	1.3	1.2	0.8	0.8
4	0.7	1.2	1.2	2.0	2.3	1.8	2.0	1.4	1.3	1.2	1.2	1.0	1.0
5	0.7	1.5	1.8	1.2	1.8	2.0	2.0	2.0	2.0	1.4	1.3	1.1	0.8
6	p1.0	1.1	1.2	1.3	1.4	1.8	1.8	1.8	1.5	1.3	1.5	0.8	1.1
7	0.7	0.8	1.0	1.2	1.3	1.4	1.8	1.8	1.9	1.9	1.2	0.8	1.1
8	0.7	0.8	1.2	1.2	1.3	1.8	1.9	1.8	p1.6c	1.4	1.4	1.3	0.9
9	p1.0c	p1.4c	1.7	1.4	1.7	2.0	1.9	2.0	2.0	1.7	1.2	1.0	0.9
10	1.0	0.9	1.2	1.4	1.5	1.4	1.5	2.0	1.4	1.4	1.7	1.0	0.6
11	1.0	1.0	1.5	1.4	1.5	1.8	1.8	1.8	1.7	1.5	1.7	1.0	1.0
12	1.0	1.0	1.8	1.4	1.5	1.7	1.8	1.7	1.7	1.5	1.4	1.6	1.0
13	0.9	1.0	1.0	1.8	2.0	1.8	1.8	1.6	1.6	1.4	1.4	1.2	1.0
14	0.8	1.4	1.1	1.5	1.5	1.7	1.8	1.8	1.6	2.0	1.8	1.6	1.0
15	1.0	1.0	1.6	1.4	1.6	1.7	...c	...c	...c	...c	...c	...c	...c
16	...c	...c	...c	...c	1.8	1.8	1.8	1.7	1.7	1.7	1.4	1.2	1.0
17	0.9	1.0	1.7	1.7	...c	...c	...c	...c	...c	...c	...c	...c	...c
18	...c	...c	...c	1.7	1.9	2.4	2.2	2.0	2.1	2.1	1.1	1.2	1.0
19	0.8	1.0	1.3	1.2	2.1	2.3	2.6	2.7	2.1	2.2	1.8	1.0	1.0
20	0.6	1.0	1.1	1.2	1.7	2.0	2.0	2.0	1.2	1.3	1.2	1.0	1.0
21	0.6	1.0	1.1	1.4	2.0	2.0	2.8	2.8	2.7	1.3	1.3	1.1	1.0
22	0.8	1.0	1.1	1.2	1.8	2.0	2.1	2.0	2.1	1.3	1.0	1.0	0.8
23	1.0	1.0	1.0	1.8	2.0	2.2	2.1	2.0	2.0	2.1	1.2	1.0	0.9
24	1.0	0.9	1.0	1.2	1.1	1.8	1.9	2.1	2.0	1.7	1.3	1.1	1.0
25	0.9	1.0	1.7	1.8	2.2	2.8	2.8	2.8	2.8	2.7	1.7	1.7	1.2
26	0.9	0.9	1.1	1.7	2.7	...c	...c	...c	...c	...c	...c	...c	0.8
27	1.0	1.5	1.5	1.6	2.0	1.8	2.0	2.1	1.9	2.0	1.9	1.8	1.9
28	1.6	1.6	1.8	1.9	...c	...c	...c	...c	...c	...c	...c	...c	1.4
29	1.6	1.9	1.8	2.0	p2.0c	2.2	2.2	2.2	p2.0c	p2.0c	1.9	1.0	1.0
30	1.0	1.0	1.9	2.0	2.0	2.1	2.2	2.1	2.1	2.0	1.6	1.6	p1.0c
31	1.0	1.4	1.8	p1.9c	2.0	2.0	2.0	2.0	2.0	1.8	1.5	1.5	1.0
* MEAN	0.9	1.1	1.4	1.6	1.8	1.9	2.0	2.0	1.8	1.7	1.4	1.2	1.0

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.8	2.7	3.0	3.5	3.6	3.6	3.6	3.6	3.5	3.4	2.9	2.7	1.8
2	2.0	2.8	3.2	3.5	3.5	3.6	3.6	3.6	3.5	3.4	2.9	2.1	1.4
3	1.2	2.4	3.1	3.4	3.8	3.6	3.7	3.7	3.4	3.0	2.9	2.5	1.6
4	1.8	2.7	3.1	3.4	3.6	3.6	3.6	3.5	3.4	3.2	2.9	2.5	1.7
5	1.8	2.4	3.1	3.4	3.4	3.6	3.6	3.5	3.6	3.6	2.8	2.7	1.7
6	p1.6	2.7	3.2	3.4	3.5	3.6	3.7	3.6	3.5	3.9	2.8	2.2	1.7
7	2.0	2.7	2.8	3.2	3.4	3.6	3.6	3.6	3.5	3.4	2.8	2.6	2.0
8	1.7	2.8	2.2	3.8	3.6	3.8	3.6	3.7	p3.3c	p2.9a	p2.6a	2.2	1.0
9	p1.8c	p2.6c	2.9	3.4	3.5	3.5	3.8	3.6	3.5	3.1	2.9	2.6	1.7
10	1.9	2.7	3.0	3.4	3.4	3.6	3.5	3.6	3.5	3.2	2.8	2.4	1.0
11	2.8	2.6	2.8	3.4	3.5	3.6	3.6	3.6	3.5	3.2	2.9	2.4	2.7
12	1.8	2.6	3.0	3.4	3.4	3.6	3.6	3.4	3.5	3.2	2.8	2.7	1.6
13	1.8	2.6	3.0	3.2	3.5	3.6	3.6	3.6	3.5	3.1	2.9	2.4	1.7
14	1.9	2.7	3.0	3.4	3.5	3.5	3.7	3.6	3.7	3.4	2.9	2.4	1.7
15	1.9	2.7	3.1	3.5	3.6	3.5	...c	...c	...c	...c	...c	...c	...c
16	...c	...c	...c	...c	3.8	3.7	3.9	3.6	3.5	3.4	2.9	2.7	1.8
17	1.8	2.6	3.0	3.2	...c	...c	...c	...c	...c	...c	...c	...c	...c
18	...c	...c	...c	3.3	3.6	3.8	3.7	3.6	3.6	3.6	3.0	2.8	1.8
19	1.2	2.6	3.0	3.3	3.4	3.6	3.6	3.6	3.4	3.4	3.1	2.7	1.8
20	1.7	2.4	2.9	3.4	3.5	3.5	3.6	3.4	3.4	3.4	2.8	2.5	1.7
21	1.7	2.7	3.0	3.4	3.5	3.6	3.6	3.7	3.7	3.4	3.0	2.5	1.8
22	1.7	2.5	2.9	3.4	3.5	3.6	3.6	3.6	3.5	3.4	3.0	2.5	1.7
23	1.8	2.8	3.0	3.4	3.4	3.6	3.6	3.5	3.5	3.4	2.9	2.5	1.8
24	1.8	2.4	2.9	3.4	3.6	3.6	3.6	3.6	3.6	3.4	2.9	2.7	1.9
25	1.7	2.7	3.0	3.4	3.6	3.6	3.7	3.6	3.5	3.4	3.0	2.7	1.9
26	1.7	2.5	2.8	3.4	3.5	3.5	3.6	3.5	3.5	3.4	3.2	2.5	1.2
27	1.6	2.4	3.1	3.3	3.6	3.5	3.6	3.6	3.5	3.4	3.4	3.1	1.9
28	1.8	p2.4c	3.1	3.4	...c	...c	...c	...c	...c	...c	...c	...c	1.8
29	1.8	2.7	3.2	3.3	p3.4c	3.5	3.6	3.6	p3.4c	p3.3c	3.1	3.1	1.8
30	1.6	2.4	3.1	3.6	3.5	3.5	3.5	3.5	3.4	3.4	3.2	2.7	p1.8c
31	1.8	2.4	3.1	3.3	3.4	3.6	3.6	3.5	3.4	3.4	3.1	2.8	1.8
* MEAN	1.8	2.6	3.0	3.4	3.5	3.6	3.6	3.6	3.5	3.3	3.0	2.6	1.7

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 247

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1943 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — FEBRUARY 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.8	6.1	4.5	3.8	3.0	2.7	4.1	6.7	8.3	8.9	8.7	9.1	9.1	9.2	10.0	10.3	9.4	8.3	7.6	7.3	6.7	5.6	p5.5f	p5.2f	7.0
2	5.0	5.3	...c	...c	...c	...c	...c	...c	7.0	7.5	8.6	9.0	9.8	9.9	10.4	9.7	9.5	9.5	8.7	7.5	p6.6f	p6.7f	p6.8f	7.7	...
3	6.8	5.2	3.6	3.6	3.2	2.7	3.7	6.2	7.4	8.4	9.0	9.5	9.9	10.0	10.1	9.7	9.6	9.3	9.1	6.1	p5.9f	p5.8f	p5.7f	p5.5f	6.9
4	p4.9f	4.8	4.3	3.8	3.3	2.8	3.8	6.3	7.1	7.4	7.8	...c	...c	...c	...c	...c	...c	...c	...c	9.3	7.8	6.3	p5.5f	p5.5f	...
5	p5.2f	p5.0f	3.0	2.2	2.2	p2.0f	3.8	6.0	6.7	7.1	7.3	7.5	7.3	7.6	8.1	p8.8c	9.5	9.9	9.6	9.6	8.5	7.2	5.7	4.9	6.4
6	3.9	2.7	p1.6b	p1.5b	p1.5b	p1.4b	4.2	6.8	7.4	p7.2c	p7.0c	p6.9c	6.7	7.1	8.1	9.0	8.9	8.9	8.7	8.5	7.5	6.3	5.5	5.4	5.9
7	4.8	3.8	p2.7f	p2.3f	p1.9b	p1.5b	4.1	6.7	8.0	8.4	7.8	7.2	7.3	7.6	8.2	8.9	9.6	9.0	8.6	8.5	7.6	6.0	4.6	3.1	6.2
8	2.5	p2.4f	p2.2f	p1.9b	p1.6b	p1.4b	4.1	6.6	7.5	p7.2c	p6.9c	p6.5c	6.2	6.0	p6.7c	p7.4c	p8.1c	8.8	8.4	7.6	7.6	6.6	6.3	6.2	5.7
9	5.5	4.8	4.1	3.4	2.9	1.9	4.4	6.4	7.6	8.3	8.8	9.0	7.9	7.7	7.9	8.2	8.6	9.0	9.3	9.3	8.4	8.0	7.3	5.5	6.8
10	4.1	3.0	2.2	1.9	p1.8b	p1.6b	4.2	6.8	7.8	8.2	p7.7c	p7.3c	6.8	7.2	p7.4c	p7.5c	p7.7c	7.7	7.8	8.4	8.3	6.9	6.7	6.3	6.1
11	6.1	5.3	3.5	p3.5f	p3.0a	p2.4a	4.1	6.6	7.5	8.1	9.2	9.2	9.4	9.8	p9.3c	p8.5c	7.7	7.6	7.4	7.4	6.8	p6.3f	p6.4f	6.6	6.7
12	p6.4f	p5.8f	p5.2f	p4.5f	3.9	3.2	4.9	7.0	7.2	p7.7c	p8.3c	8.8	9.2	8.6	p8.6c	p8.7c	8.7	8.4	8.1	8.0	7.5	7.7	7.4	p6.8f	7.1
13	p7.2f	7.5	6.7	p4.8	3.9	2.9	4.3	7.0	8.2	8.7	9.3	9.3	9.3	8.5	8.4	8.6	8.7	p8.8	8.5	9.3	p8.9c	8.5	6.9	p6.3f	7.5
14	p5.8f	5.2	4.8	4.2	3.7	1.5	3.8	6.2	7.6	p8.5	8.4	7.7	7.5	p7.9	8.4	9.3	8.9	9.1	p8.6	8.4	8.4	8.2	7.7	7.8	7.0
15	7.3	6.3	5.4	3.5	1.8	p1.2b	3.9	6.5	8.2	9.1	8.1	8.3	8.7	8.8	8.8	9.2	p9.4	8.9	8.5	7.3	6.8	6.4	6.9	6.9	6.9
16	p6.8f	6.6	5.5	3.3	p1.4b	p1.2b	4.1	6.9	8.2	8.8	8.2	7.9	8.8	9.7	10.4	10.5	10.0	9.6	9.5	p8.5f	8.1	p7.4	6.6	6.1	7.3
17	5.9	5.2	3.4	1.9	1.5	p1.4f	4.0	7.0	7.5	8.9	9.9	7.8	7.6	9.0	10.0	10.3	11.0	10.7	p10.3c	p10.0c	p9.8c	9.2	7.4	7.1	7.4
18	7.2	p6.4f	5.6	3.5	2.6	2.8	3.4	6.6	7.2	p6.8	7.0	7.2	7.7	8.1	8.4	9.5	p9.7	9.0	8.5	7.0	7.0	6.8	p6.1f	p5.5f	6.6
19	p4.8f	p4.9f	5.1	3.3	2.4	1.9	3.4	7.1	8.0	8.4	8.9	9.0	9.2	10.2	11.4	12.0	11.0	11.0	9.9	p9.2c	8.5	7.7	6.8	p6.5c	7.5
20	...c	...c	...c	...c	...c	...c	...c	...c	7.5	7.3	7.2	7.3	7.6	8.3	8.4	8.8	8.8	9.0	8.7	8.6	p8.6f	8.6	8.0	6.3	...
21	p5.3f	4.8	4.4	3.7	2.5	1.9	4.0	6.6	7.9	8.4	7.6	7.0	7.2	7.6	8.3	8.6	9.7	9.7	9.9	9.0	8.2	6.8	p6.1f	p5.3f	6.7
22	4.6	4.5	3.7	2.8	p1.4b	p1.2b	3.9	p7.1	p8.0	p8.3	8.5	8.6	9.4	9.5	9.6	9.2	9.5	9.8	9.3	p8.9f	8.5	8.4	6.9	5.0	6.9
23	4.6	4.3	2.8	1.9	1.4	p1.1b	4.0	6.8	8.2	8.4	7.7	7.3	7.6	7.7	7.7	8.4	p8.4c	p8.5c	8.5	8.5	8.2	7.8	8.0	6.7	6.4
24	p6.2f	p5.7f	p5.1f	4.6	4.5	4.2	5.2	7.4	8.2	8.6	9.5	10.0	9.7	9.9	9.6	9.8	10.0	10.4	10.0	10.2	p9.6f	8.9	9.2	7.9	8.1
25	p6.7f	p6.5f	5.8	4.7	3.3	2.6	4.0	7.0	8.3	8.5	7.2	7.5	7.8	7.8	8.1	8.4	8.5	9.1	9.6	8.9	9.5	9.9	10.0	8.8	7.4
26	7.8	6.7	5.5	p4.6f	p3.6f	p2.5f	3.8	7.2	8.8	p9.4	8.5	8.5	8.3	8.4	8.7	9.1	10.1	10.5	9.8	p9.0c	8.2	6.9	8.1	5.7	7.5
27	8.4	7.0	5.3	5.0	6.6	4.9	4.6	7.5	8.5	9.2	9.8	10.5	11.1	11.7	11.8	11.5	11.8	12.0	11.8	p11.7f	10.8	11.0	10.3	8.4	9.2
28	p5.9f	4.9	4.5	4.4	4.0	p3.5b	4.5	7.2	8.3	8.0	7.4	7.8	8.1	8.6	9.1	9.8	10.1	9.4	8.5	6.8	6.3	6.7	p6.5f	p6.4f	6.9
29																									
30																									
31																									
MEAN*	5.8	5.2	4.2	3.4	2.8	2.2	4.1	6.8	7.8	8.2	8.2	8.2	8.3	8.6	9.0	9.2	9.4	9.3	9.0	8.5	8.0	7.4	7.0	6.3	7.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 248

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1943 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — FEBRUARY 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	260	240	230	230	240	300	260	290	300	320	340	360	370	360	370	350	340	250	270	270	280	330	350	295	300
2	250	230	...c	...c	...c	...c	...c	...c	330	340	340	320	310	300	300	310	340	310	270	290	320	270	260	240	...
3	240	230	260	260	240	290	260	310	320	310	320	330	330	320	310	310	320	330	260	320	350	360	340	250	299
4	240	250	260	270	280	270	260	230	320	330	320	...c	...c	...c	...c	...c	...c	...c	...c	280	310	340	370	350	...
5	280	230	240	240	290	340	250	230	310	340	350	370	370	370	350	q330c	310	290	260	270	330	290	300	310	302
6	260	210	q270b	q270b	q280b	q280b	260	280	300	q320c	q350c	q370c	390	370	330	300	300	290	260	270	280	270	270	260	293
7	230	240	200	200	q220b	q230b	250	270	300	330	370	380	370	370	340	320	300	290	270	280	250	280	280	310	287
8	330	260	200	q210b	q220b	q230b	240	280	330	q350b	q380c	q400c	420	440	q400c	q360c	q320c	270	260	260	250	230	230	230	296
9	260	270	280	270	250	240	250	260	290	330	350	380	360	370	360	330	320	300	270	250	260	250	260	290	294
10	300	280	310	320	220	200	260	270	310	360	q380c	q400c	420	410	q390c	q370c	q350c	310	270	260	290	280	230	240	310
11	230	210	270	330	300	330	260	260	280	320	340	370	370	350	q370c	q360c	360	230	270	290	290	300	290	295	303
12	300	330	340	300	260	240	250	270	280	q300c	q330c	350	370	370	q350c	q340c	320	310	250	280	290	270	280	290	303
13	250	220	260	270	230	240	260	280	300	340	360	360	390	390	370	350	330	320	260	240	260	260	270	300	296
14	300	260	270	260	210	270	260	310	310	q330	350	360	380	q390	350	340	330	330	260	250	250	260	250	270	298
15	260	240	230	230	250	q280b	250	280	320	310	370	380	350	350	360	q350	q350	310	260	280	290	290	280	290	298
16	280	240	220	220	q240b	q240b	240	270	300	330	390	380	370	350	310	300	310	320	270	290	290	310	320	280	295
17	250	230	220	250	290	430	230	280	280	320	370	330	370	330	320	330	330	250	260	280	260	250	290	290	293
18	270	260	250	230	250	290	270	310	380	q360	380	360	380	360	350	340	q310	310	260	270	280	290	360	360	312
19	330	270	220	220	230	240	250	270	300	320	350	310	320	320	310	290	290	310	270	270	270	300	310	q310c	287
20	...c	...c	...c	...c	...c	...c	...c	...c	320	360	360	380	380	380	340	320	310	270	270	290	280	210	280	320	...
21	300	290	200	240	230	250	250	280	300	340	370	400	400	390	360	350	310	300	240	280	310	305	300	320	305
22	310	270	230	230	q250b	q260b	260	260	280	315	330	330	340	340	340	340	340	310	260	290	290	260	250	280	290
23	250	220	240	240	270	300	250	280	320	350	380	380	380	380	380	360	q320c	q290c	250	280	310	280	260	280	302
24	310	310	290	260	240	245	250	260	280	310	340	340	360	350	325	330	320	300	250	270	280	250	240	280	291
25	300	280	240	220	220	230	250	270	290	350	370	380	380	360	340	320	310	310	270	280	270	250	240	250	291
26	280	340	350	400	410	410	260	280	310	320	q350	360	360	350	320	300	330	300	270	q300c	330	280	260	240	321
27	230	230	240	250	240	240	260	270	290	300	320	340	330	330	320	320	310	300	280	290	280	260	240	270	281
28	340	330	330	280	290	q280c	280	280	300	350	340	380	350	340	330	320	320	250	270	290	310	290	320	300	311
29																									
30																									
31																									
MEAN*	276	258	256	258	256	275	255	274	305	331	354	363	367	361	344	331	322	295	263	278	288	279	283	286	298

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 249

FEBRUARY 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1943

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.3	4.4	4.5	4.6	4.5	4.5	4.5	4.4	4.4	4.4	...	...
2	...	p4.2c	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.3	...
3	...	4.2	4.4	4.5	4.5	4.5	4.6	4.6	4.5	4.3	4.4	4.3	...
4	...	...	4.3	4.4	4.5	...c	...c	...c	...c	...c	...c	...c	...
5	...	...	4.2	4.4	4.5	4.6	4.7	4.7	4.5	p4.3c	4.2	4.1	...
6	...	4.3	4.3	p4.5c	p4.5c	p4.6c	4.6	4.6	4.5	4.4	4.5	4.3	...
7	...	4.2	4.3	4.5	4.5	4.5	4.6	4.6	4.5	4.3	4.3	4.2	...
8	...	4.3	4.5	p4.5c	p4.6c	p4.6c	4.5	4.5	p4.5c	p4.4c	p4.4c	4.1	...
9	...	4.1	4.5	4.5	4.6	4.6	4.6	4.6	4.5	4.4	4.3	4.3	...
10	...	4.2	4.4	4.4	p4.5c	p4.6c	4.6	4.6	p4.6c	p4.5c	p4.4c	4.3	...
11	...	4.1	4.5	4.5	4.5	4.7	4.6	4.6	p4.6c	p4.5c	4.4	...	...
12	...	4.2	4.5	p4.5c	p4.6c	4.7	4.6	4.6	p4.5c	p4.4c	4.3	4.2	...
13	...	4.3	4.4	4.5	4.6	4.7	4.8	4.7	4.5	4.5	4.4	4.3	...
14	...	4.3	4.5	p4.5	4.5	4.5	4.6	p4.7	4.5	4.3	4.4	4.2	...
15	...	4.3	4.5	4.5	4.7	4.6	4.6	4.6	4.6	p4.5	p4.4	4.1	...
16	...	4.2	4.4	4.6	4.8	4.8	4.7	4.6	4.4	4.5	4.2	4.2	...
17	...	4.2	4.3	4.5	4.6	4.6	4.6	4.6	4.5	p4.5c	4.5	...	...
18	...	4.2	4.6	p4.5	4.7	4.6	4.7	4.7	4.7	4.5	p4.5	4.3	...
19	...	4.3	4.5	4.6	4.6	4.5	4.5	4.5	4.6	4.3	4.4	4.4	...
20	...	p4.3c	4.5	4.5	4.6	4.7	4.6	4.6	4.5	4.5	4.2	...	...
21	...	4.2	4.5	4.4	4.6	4.7	4.5	4.7	4.5	4.5	4.5	4.5	...
22	...	4.3	4.5	4.6	4.5	4.7	4.6	4.6	4.7	4.6	4.5	4.4	...
23	...	4.4	4.6	4.5	4.7	4.7	4.6	4.7	4.6	4.5	p4.4c	p4.3c	...
24	...	4.2	4.6	4.5	4.7	4.6	4.7	4.6	4.5	4.5	4.5	4.2	...
25	...	4.2	4.5	4.5	4.7	4.7	4.7	4.7	4.6	4.5	4.4	4.3	...
26	...	4.3	4.5	4.6	p4.8	4.8	4.8	4.7	4.5	4.5	4.7	4.3	...
27	...	4.3	4.5	4.7	4.6	4.8	4.7	4.6	4.7	4.5	4.5	4.2	...
28	...	4.3	4.4	4.6	4.6	4.8	4.6	4.6	4.6	4.5	4.5	...	...
29													
30													
31													
* MEAN	...	4.2	4.4	4.5	4.6	4.6	4.6	4.6	4.5	4.4	4.4	4.3	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	240	220	210	210	210	210	200	200	200	190	...	...
2	...	p250c	230	220	p220a	p210a	210	205	200	200	210	220	...
3	...	250	220	210	200	200	210	200	210	210	200	250	...
4	...	...	205	210	205	...c	...c	...c	...c	...c	...c	...c	...
5	...	...	210	210	205	200	200	200	200	p200c	p220c	240	...
6	...	240	215	p210c	p205c	p200c	200	200	200	190	190	250	...
7	...	230	220	210	210	200	200	200	200	190	190	230	...
8	...	230	200	p200c	p200c	p200c	200	200	p200c	p210c	p240c	240	...
9	...	240	220	220	210	210	200	200	200	200	200	240	...
10	...	230	230	220	p210c	p200c	200	205	p200c	p200c	p190c	250	...
11	...	240	230	220	210	200	200	200	p210c	p200c	200	...	...
12	...	230	220	p210c	p200c	200	200	200	p200c	p200c	190	240	...
13	...	230	230	220	220	210	210	210	200	210	200	230	...
14	...	230	210	p220	210	210	200	p200	200	200	200	230	...
15	...	230	210	210	200	200	205	200	200	p220	p210	210	...
16	...	210	190	200	190	190	205	200	200	200	200	230	...
17	...	240	220	220	220	210	210	210	210	p200c	200	...	...
18	...	240	220	p220	210	200	200	210	200	210	p200	220	...
19	...	220	190	220	220	200	200	200	220	200	200	230	...
20	...	p230c	220	220	220	210	210	200	200	210	200	...	...
21	...	230	220	200	200	200	200	200	205	200	200	220	...
22	...	220	220	220	220	200	210	200	210	205	210	230	...
23	...	220	210	230	220	210	210	210	200	210	p210c	p230c	...
24	...	240	230	190	220	210	200	205	200	200	210	230	...
25	...	230	210	210	210	200	205	200	200	200	210	250	...
26	...	240	235	230	p230	210	200	210	200	200	210	240	...
27	...	240	230	220	220	210	220	210	210	240	270	250	...
28	...	240	220	210	210	230	220	210	210	220	220	...	...
29													
30													
31													
* MEAN	...	234	217	214	211	205	205	203	203	205	206	234	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 250

FEBRUARY 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1943

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.0	1.6	1.8	1.9	1.9	2.0	2.1	2.0	1.9	1.6	1.0	1.0
2	p0.8c	p1.0c	1.5	2.0	2.0	2.0	2.0	3.4	2.0	2.0	2.0	1.6	1.0
3	1.0	1.0	1.5	1.8	2.0	2.0	2.2	2.0	2.0	1.9	1.8	1.0	1.0
4	1.0	1.4	1.8	1.8	1.8	...c	...c	...c	...c	...c	...c	...c	...c
5	1.0	1.0	1.5	1.8	1.8	1.9	1.9	1.9	2.0	p1.9c	1.8	1.8	1.7
6	1.0	1.0	1.6	p1.8c	p1.9c	p1.9c	2.0	2.0	2.8	1.9	1.9	1.9	1.0
7	1.0	1.0	1.5	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.0
8	1.0	1.0	1.5	p1.8c	p1.9c	p2.0c	2.0	2.0	p1.9c	p1.8c	1.8	1.8	1.0
9	1.0	1.6	1.8	1.9	1.7	2.8	2.0	p3.5	2.8	1.9	1.8	1.9	1.0
10	1.0	1.0	1.8	1.9	p2.0c	p2.4c	2.8	2.8	p2.4c	p1.9c	1.8	1.8	1.0
11	1.0	1.8	1.9	1.9	2.0	3.1	2.8	2.0	p2.0c	p2.0c	2.0	1.0	1.0
12	1.0	1.8	2.0	p2.3c	p2.5c	3.0	1.9	1.9	p1.8c	p1.8c	1.7	1.0	0.9
13	0.9	1.1	1.8	1.8	1.8	2.2	2.0	2.0	1.8	1.8	1.4	1.1	0.8
14	0.8	1.0	1.2	1.8	1.8	2.0	2.4	2.2	2.2	1.9	1.4	1.2	1.1
15	0.9	1.1	1.2	1.3	2.2	2.2	2.2	2.0	2.0	2.2	1.4	1.1	0.9
16	0.8	0.9	1.2	1.4	2.0	2.0	2.4	2.8	2.6	1.5	1.6	1.2	0.9
17	0.8	1.1	1.2	1.3	2.0	2.3	2.4	2.7	1.8	p2.0c	2.1	1.2	1.1
18	0.8	1.0	1.0	1.4	1.8	2.2	2.2	2.3	2.3	1.8	1.3	1.1	0.8
19	1.0	1.0	1.3	1.4	1.8	1.7	2.1	2.0	1.4	1.8	1.2	1.2	1.2
20	p1.0c	p1.0c	1.3	1.3	1.7	1.9	2.1	2.0	2.0	2.0	1.0	0.9	1.0
21	0.8	0.8	1.2	1.3	1.4	1.5	1.8	1.9	1.5	2.2	1.3	1.2	0.8
22	0.8	1.2	1.2	2.4	2.6	2.0	p2.5c	3.0	2.2	1.4	1.3	1.1	1.1
23	0.9	1.2	1.4	1.4	1.4	2.2	1.8	1.8	1.9	1.4	p1.2c	p1.2c	1.0
24	0.8	1.0	1.2	1.4	1.9	1.8	1.8	1.8	1.9	1.4	1.2	1.1	0.8
25	0.8	0.8	1.2	1.3	1.4	2.0	2.2	2.1	1.8	1.9	1.3	1.3	1.0
26	0.8	1.1	1.3	2.0	1.5	2.3	2.1	1.4	1.9	1.6	1.4	1.2	0.9
27	0.8	1.1	1.3	1.0	2.0	1.9	p2.0c	2.0	2.4	1.6	1.4	p1.1c	0.9
28	p0.8c	p1.0c	1.2	1.4	1.9	2.1	2.4	2.1	2.0	1.9	1.4	1.0	0.8
29													
30													
31													
MEAN*	0.9	1.1	1.4	1.7	1.9	2.1	2.1	2.2	2.0	1.8	1.6	1.3	1.0

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.6	2.5	3.1	3.2	3.5	3.6	3.5	3.5	3.4	3.4	3.2	3.1	1.5
2	p1.6c	p2.6c	3.2	3.6	3.6	p4.1a	3.7	3.6	3.5	3.4	3.2	3.4	1.9
3	1.6	2.6	3.1	3.2	3.4	3.4	3.5	3.5	3.7	3.4	3.0	2.7	1.8
4	1.6	2.0	3.1	3.4	3.5	...c	...c	...c	...c	...c	...c	...c	...c
5	1.5	2.4	2.9	3.1	3.5	3.6	3.6	3.5	3.5	p3.5c	3.5	3.0	2.0
6	1.5	1.9	2.9	p3.1c	p3.3c	p3.5c	3.7	3.6	3.5	3.4	3.1	2.7	1.8
7	1.6	2.5	2.9	3.4	3.4	3.6	3.6	3.5	3.5	3.4	3.1	2.7	1.9
8	1.7	2.6	2.9	p3.1c	p3.3c	p3.5c	3.7	3.6	p3.4c	p3.3c	3.1	2.8	1.9
9	1.5	2.4	3.1	3.4	3.6	3.6	3.8	4.1	3.7	3.4	3.0	2.8	1.9
10	1.6	2.6	3.0	3.4	p3.6c	p3.8c	4.1	3.6	p3.4c	p3.3c	3.1	2.8	2.0
11	1.6	2.4	3.0	3.5	3.6	3.7	3.7	3.7	3.5	p3.3c	3.1	2.6	1.8
12	1.6	2.3	3.0	p3.2c	p3.4c	3.7	3.8	3.6	p3.4c	p3.4c	3.2	2.8	1.7
13	1.6	2.3	3.0	3.4	3.5	3.6	3.8	3.6	3.5	3.5	2.	2.6	1.7
14	1.4	2.2	3.0	3.6	3.5	3.7	3.8	3.8	3.6	3.5	3.0	2.5	1.8
15	1.5	2.1	3.0	3.5	3.7	3.7	3.8	3.9	3.6	3.5	2.9	2.6	1.6
16	1.5	2.5	3.0	3.5	3.7	3.6	3.7	3.8	3.8	3.6	3.0	2.6	1.8
17	1.6	2.5	2.9	3.5	3.6	3.7	3.9	3.6	3.9	p3.4c	3.0	3.0	1.8
18	1.4	2.2	2.7	3.5	3.6	3.7	3.6	3.7	3.4	3.5	2.8	2.4	1.7
19	1.2	2.4	2.9	3.6	p3.6c	p3.7c	p3.6c	p3.5c	p3.6c	3.4	3.0	p2.4c	1.7
20	p1.4c	p2.6c	3.1	3.7	3.8	4.0	4.2	3.9	3.8	3.6	3.8	2.4	1.7
21	1.6	2.3	2.9	3.4	3.5	3.6	3.5	3.6	3.5	3.4	3.0	2.7	1.7
22	1.5	2.3	3.2	3.7	3.6	3.7	3.7	3.7	3.8	3.5	3.1	2.8	1.8
23	1.5	2.3	3.0	3.5	3.7	p3.8	p3.7	p3.8	3.6	3.5	p3.0c	p2.4c	1.9
24	1.4	2.5	3.0	3.4	3.6	3.6	3.7	3.7	3.6	3.4	3.0	2.4	1.6
25	1.4	2.3	2.9	3.4	3.6	3.7	3.8	3.7	3.7	3.5	3.0	2.5	1.7
26	1.4	2.4	2.9	3.6	3.7	3.8	3.8	3.7	3.6	3.4	3.0	2.4	1.5
27	1.6	2.4	3.0	3.4	3.5	3.8	3.8	3.7	3.6	3.5	3.2	2.9	2.0
28	p1.6c	p2.8c	3.0	3.4	3.4	3.6	3.7	3.7	3.6	3.4	2.9	2.4	1.6
29													
30													
31													
MEAN*	1.5	2.4	3.0	3.4	3.4	3.7	3.7	3.7	3.6	3.4	3.1	2.7	1.8

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 251

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1943 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MARCH 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.4	6.5	5.8	4.8	p3.8f	2.6	4.3	7.0	7.7	8.5	8.4	8.4	8.8	10.3	11.0	11.1	10.8	10.4	8.6	p8.2	8.0	p8.3f	8.6	8.3	7.8
2	p8.2f	p7.4f	6.7	4.9	1.9	p1.3b	4.2	6.7	7.3	p8.2c	9.1	9.5	9.5	8.6	9.2	10.0	10.4	10.4	9.7	10.2	10.4	10.6	9.6	p8.9f	8.0
3	p7.2f	p5.4f	p5.0f	p4.5f	4.9	p2.7f	4.4	6.9	8.5	10.0	9.7	8.5	8.4	8.5	9.4	9.9	10.1	10.7	9.5	7.9	6.7	6.3	p6.6f	p6.9f	7.4
4	7.2	6.2	6.7	6.1	5.0	3.8	3.9	7.6	7.8	9.4	10.6	10.5	10.4	10.7	10.9	p11.0c	11.1	11.8	10.6	10.7	10.7	10.5	9.5	8.5	8.8
5	p7.8f	p7.1f	p6.4f	p5.7f	p4.6f	p3.5f	3.6	7.0	8.5	8.8	8.3	8.4	8.2	9.3	10.4	10.8	11.5	10.8	10.0	10.4	10.5	10.8	11.2	10.4	8.5
6	8.8	7.3	5.1	3.7	2.9	2.6	4.2	6.7	7.8	8.4	8.0	7.9	8.6	9.9	10.7	10.7	10.9	10.4	10.3	9.8	10.0	10.3	9.8	8.4	8.0
7	6.6	5.4	4.0	2.1	1.5	1.1	3.9	7.1	8.3	8.5	7.6	7.8	8.7	8.7	9.1	9.9	10.9	10.4	9.6	9.7	9.6	10.2	9.6	8.8	7.5
8	8.4	8.1	6.8	5.9	5.4	4.9	5.7	7.4	8.4	8.9	8.8	8.4	8.7	9.7	10.2	10.4	10.5	9.9	8.8	8.0	8.5	9.3	9.6	9.1	8.3
9	8.8	8.7	6.1	4.4	3.5	4.1	4.8	7.1	7.9	9.3	8.7	7.8	7.9	8.3	8.7	8.8	9.6	10.1	9.6	9.2	8.5	8.4	8.7	8.6	7.8
10	8.5	7.0	5.6	3.3	2.4	1.6	4.0	6.6	7.9	8.9	9.3	9.1	8.2	8.4	8.6	8.8	9.1	9.6	9.7	9.2	8.6	p8.9f	p9.3f	9.6	7.6
11	8.5	7.4	5.6	4.5	3.8	3.0	4.4	7.0	8.2	9.2	9.7	10.4	10.0	8.9	8.4	9.3	9.5	9.2	9.5	10.2	9.5	p9.3f	p9.0f	8.8	8.1
12	9.0	9.5	8.7	8.0	6.5	5.6	5.8	7.9	8.7	9.3	9.7	10.2	10.5	9.9	10.0	9.9	9.4	8.8	8.4	p8.6f	p8.7f	p8.8f	p8.9f	p9.0f	8.7
13	9.5	9.5	8.4	6.1	3.7	2.0	4.1	6.8	8.6	9.7	10.6	11.1	10.7	10.0	10.3	10.6	10.0	9.6	9.6	p9.8f	p10.0f	p10.2f	10.4	10.3	8.8
14	9.4	9.2	7.7	4.8	2.6	1.7	3.9	7.3	8.8	9.3	9.3	p8.1	7.8	7.8	8.0	8.6	9.1	8.2	p7.9f	7.9	8.0	8.2	8.3	8.4	7.5
15	p7.1f	5.8	4.2	3.0	1.9	1.4	3.9	7.0	8.4	9.1	7.8	7.7	7.5	7.7	8.2	8.7	9.3	9.2	9.1	p9.0f	8.8	p8.9f	9.6	10.0	7.2
16	9.1	6.8	4.1	3.3	p3.2f	3.1	4.1	6.4	8.2	10.2	8.8	8.4	7.3	7.2	7.6	7.8	8.0	8.6	9.3	8.9	8.4	8.5	8.5	8.4	7.3
17	8.3	6.9	4.8	4.2	3.7	3.4	4.8	7.2	9.0	10.2	10.3	10.2	9.0	7.9	8.0	8.0	7.9	7.6	8.3	8.0	p8.0f	p7.9f	p7.8f	7.7	7.5
18	7.5	6.4	4.4	3.5	2.7	2.5	4.4	7.3	8.7	9.3	9.8	10.4	9.6	8.8	8.9	9.7	9.8	9.5	10.0	p9.5f	p8.9f	p8.4f	9.5	9.6	7.9
19	8.8	p4.4c	2.1	p1.9b	p1.6b	p1.4b	4.0	7.1	8.6	9.8	10.2	9.3	8.4	8.8	9.5	10.2	10.6	10.9	10.6	9.4	10.4	9.8	10.5	9.3	7.8
20	8.5	4.6	2.6	1.9	p1.7b	p1.5b	4.0	7.1	8.9	8.8	6.9	7.1	7.5	7.5	7.8	8.7	9.8	10.1	9.4	p8.6c	7.7	7.8	p8.2c	8.6	6.9
21	8.6	8.6	5.1	4.0	3.1	2.1	4.0	7.0	8.2	9.6	9.0	6.8	6.6	7.0	7.8	8.6	9.4	9.6	9.7	9.0	8.5	8.9	9.5	9.2	7.5
22	8.4	8.0	6.2	3.8	3.0	2.2	4.0	7.3	8.8	9.6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	11.4	10.7	9.0	8.9	...
23	8.1	7.5	5.7	4.5	4.9	p2.0c	3.7	7.0	8.7	9.0	8.1	8.2	8.0	7.9	8.4	9.1	10.0	10.7	10.5	9.9	9.5	9.5	9.9	9.2	7.9
24	7.4	5.6	4.1	2.9	2.6	2.9	3.7	7.0	8.3	8.8	8.3	8.2	8.3	8.4	8.6	8.7	8.4	8.4	8.4	p7.4f	p6.4f	p6.7f	7.0	p6.5f	6.8
25	6.3	4.1	4.2	3.1	2.1	1.8	4.1	6.9	8.4	9.3	10.2	9.6	8.4	8.4	9.2	10.1	10.2	10.2	10.5	p9.7f	p9.9f	p9.4f	p9.0f	8.5	7.6
26	p6.0c	p5.5c	p5.1c	4.6	3.0	2.3	4.1	7.0	8.3	p9.4	9.6	7.3	p7.3	7.7	8.1	8.8	9.3	9.3	9.3	8.7	9.8	p9.8f	9.7	8.5	7.4
27	7.2	6.3	4.2	3.1	p2.0b	p1.4b	p3.7b	6.7	8.2	8.8	7.8	7.1	7.1	7.5	7.8	8.3	8.9	9.2	9.6	9.1	8.7	p8.4f	8.1	8.7	7.0
28	9.2	7.6	5.8	3.3	2.2	1.5	3.9	6.7	8.0	9.0	8.5	7.6	7.7	7.9	8.3	8.9	9.2	9.6	9.6	9.2	9.4	9.4	10.0	10.2	7.6
29	9.9	9.2	8.2	7.2	6.2	5.0	4.2	6.7	8.2	p9.2c	8.4	8.2	8.5	9.1	8.4	p8.4c	p8.3c	p8.2c	p8.2c	p8.0c	p7.7c	p7.4c	p7.2c	p7.1c	7.8
30	7.0	7.9	p6.3c	4.7	4.0	4.1	4.2	8.3	9.7	p10.1c	p10.4c	p10.9c	11.4	12.7	p12.2c	11.7	10.9	9.5	8.7	p8.2c	7.8	7.2	p7.8f	8.3	8.5
31	8.3	8.6	8.4	5.9	4.8	4.8	p6.0	7.2	8.5	9.4	9.2	8.9	8.6	9.1	9.8	9.8	9.5	8.8	7.9	p6.6f	8.0	8.9	9.8	9.4	8.2
MEAN*	8.1	7.0	5.6	4.3	3.4	2.7	4.3	7.1	8.4	9.2	9.0	8.7	8.6	8.8	9.1	9.5	9.8	9.7	9.4	9.0	8.9	9.0	9.0	8.8	7.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 252

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1943 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — MARCH 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	290	230	220	210	220	240	250	260	300	320	350	340	340	320	320	320	330	320	260	260	240	260	290	320	284
2	310	290	250	210	230	270	260	240	270	q300c	320	330	340	330	320	310	300	240	270	260	q270a	270	320	370	287
3	360	360	300	270	240	230	260	280	290	330	340	350	360	350	310	320	310	300	270	290	330	340	310	280	308
4	330	310	270	230	230	320	270	260	300	310	320	310	340	340	320	q310c	300	220	260	270	270	280	280	350	292
5	400	380	320	280	270	280	270	280	300	340	350	330	370	340	320	300	290	240	270	250	250	240	240	230	298
6	220	210	220	230	230	250	260	280	300	320	340	350	340	320	310	320	300	300	260	280	270	240	250	250	277
7	220	220	210	240	240	290	250	270	310	330	360	350	360	350	350	330	290	270	260	270	250	260	240	270	283
8	270	260	250	230	250	270	260	260	280	310	340	360	350	350	330	320	310	250	270	280	260	270	220	260	284
9	250	230	210	240	280	270	250	250	280	310	360	380	360	330	320	310	300	300	260	300	280	250	250	220	283
10	220	220	230	240	250	260	250	260	280	300	340	350	360	360	320	340	290	290	260	320	320	210	240	220	280
11	210	210	240	250	240	250	260	260	290	300	340	360	340	360	350	320	300	300	250	280	320	350	330	230	289
12	230	240	250	270	250	240	250	250	260	300	330	340	330	330	340	320	300	300	280	320	340	300	255	230	286
13	210	220	220	210	220	250	250	260	270	310	310	330	330	350	330	310	270	290	280	320	300	300	260	230	276
14	240	240	240	240	250	265	260	260	300	320	350	q350	380	370	340	320	320	280	q270	q350	430	420	340	260	308
15	220	220	220	230	260	270	250	270	310	310	350	360	380	350	350	330	300	290	270	330	320	260	250	250	290
16	230	230	210	270	340	240	250	250	280	300	320	370	370	350	360	320	300	280	260	320	340	280	230	220	288
17	220	220	220	240	270	250	270	270	280	290	320	350	360	350	340	330	290	300	260	330	330	300	430	210	293
18	200	210	230	240	250	260	250	250	290	300	320	340	350	340	340	290	290	290	270	350	280	240	230	230	277
19	210	q220c	240	q280b	q310b	q280b	240	260	280	290	330	350	350	330	310	330	290	300	270	290	270	240	210	190	278
20	200	210	250	240	q240b	q250b	250	270	300	330	360	380	340	360	350	320	310	250	310	330	300	300	280	270	292
21	250	210	220	230	230	230	240	240	280	300	320	380	380	350	340	330	310	q310a	q320a	330	310	240	230	260	285
22	260	220	190	240	240	230	260	260	300	310	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	270	260	q270c	q260c	...
23	250	240	240	260	270	q270c	270	280	300	320	340	340	340	350	340	310	290	290	270	310	310	240	215	210	286
24	200	220	230	250	300	315	270	280	290	330	340	360	370	350	330	310	300	310	280	360	340	220	250	240	294
25	220	210	220	230	250	270	260	q280c	300	320	340	360	370	340	370	320	300	290	290	340	320	290	240	240	290
26	250	210	200	220	240	250	260	260	280	320	340	370	q400	370	340	320	310	290	280	260	290	250	220	210	281
27	220	210	220	q240b	q270b	q200b	260	270	290	340	370	390	390	370	350	330	320	260	280	320	320	270	260	260	292
28	250	230	220	250	240	260	250	280	300	330	360	350	360	340	320	300	290	290	255	280	310	280	240	240	284
29	250	250	240	240	250	240	270	270	300	330	350	350	350	350	380	330	300	260	250	310	300	290	260	250	290
30	230	230	230	320	340	340	270	260	260	q280c	q300c	q310c	320	310	320	300	290	310	260	300	320	280	260	220	286
31	220	210	220	240	260	280	260	260	290	310	320	330	340	320	300	290	290	240	270	330	280	230	230	250	274
MEAN*	246	238	233	244	257	262	257	264	289	313	338	351	356	344	334	317	300	282	270	305	301	273	262	249	287

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 253

MARCH 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1943

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.3	4.5	4.5	4.6	4.7	4.7	4.7	4.7	4.5	4.4	4.2	...
2	...	...	4.3	p4.5c	4.7	4.6	4.7	4.6	4.6	4.5	4.5	...	...
3	...	4.2	4.5	4.8	4.7	4.8	4.8	4.7	4.6	4.6	4.5	4.3	...
4	...	4.0	4.4	4.6	4.6	4.6	4.7	4.8	4.6	p4.5c	4.4	...	...
5	...	4.3	4.5	4.5	4.8	4.7	4.9	4.8	4.7	4.5	4.4	...	...
6	...	4.3	4.4	4.6	4.6	4.7	4.8	4.7	4.6	4.5	4.4	4.4	...
7	...	4.1	4.6	4.5	4.7	4.7	4.7	4.7	4.9	4.6	4.4	...	...
8	...	4.2	4.5	4.5	4.6	4.8	4.7	4.8	4.8	4.3	4.4	...	...
9	...	4.2	4.5	4.6	4.7	4.8	4.7	4.6	4.5	4.5	4.5	4.3	...
10	...	4.0	4.4	4.5	4.6	4.7	4.6	4.7	4.5	4.5	4.4	4.2	...
11	...	4.3	4.7	4.6	4.7	4.8	4.7	4.7	4.6	4.5	4.3	4.2	...
12	...	4.0	4.4	4.7	4.6	4.6	4.7	4.7	4.5	4.5	4.4	4.2	...
13	...	4.2	4.4	4.5	4.5	4.7	4.7	4.7	4.6	4.4	4.1	p4.1a	...
14	...	4.4	4.4	4.7	4.7	p4.7	p4.8c	4.8	4.7	4.4	4.5	p4.3c	...
15	...	4.1	4.6	4.5	4.7	4.7	4.8	4.6	4.5	4.5	4.2	4.1	...
16	...	4.1	4.5	4.7	4.6	4.7	4.6	4.7	4.7	4.5	4.5	4.0	...
17	...	4.2	4.5	4.5	4.8	4.9	4.7	4.7	4.7	4.5	4.2	4.3	...
18	...	4.3	4.4	4.8	4.7	4.8	4.8	4.7	4.7	4.4	4.3	4.3	...
19	...	4.1	4.3	4.6	4.6	4.8	4.8	4.6	4.6	4.8	4.4	4.3	...
20	...	4.3	4.5	4.6	4.6	4.8	4.6	4.8	4.6	4.6	4.4	...	...
21	...	4.1	4.5	4.7	4.6	4.7	4.8	4.8	4.6	4.8	4.5	p4.3a	...
22	...	4.2	4.4	4.6	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...	4.2	4.6	4.7	4.8	4.7	4.8	4.7	4.7	4.6	4.3	4.3	...
24	...	4.2	4.4	4.6	4.8	4.8	4.8	4.8	4.5	4.4	4.3	4.2	...
25	...	p4.2c	4.5	4.8	4.8	4.8	4.8	4.6	p4.4c	4.2	p4.3c	4.3	...
26	...	4.2	4.3	4.6	4.7	4.7	p4.8	4.8	4.6	4.5	p4.4c	4.2	...
27	...	4.3	4.4	4.8	4.6	4.7	4.7	4.5	4.6	4.5	4.4	...	...
28	...	4.3	4.4	4.7	4.7	4.6	4.7	4.5	4.5	4.5	4.3	4.2	...
29	...	4.1	4.4	4.6	4.6	4.6	4.6	4.7	4.7	4.5	4.2	...	...
30	...	4.2	4.4	4.6	4.6	p4.6c	4.7	4.5	4.6	4.5	4.3	4.3	...
31	...	4.2	4.4	4.6	4.6	4.7	4.7	4.5	4.5	4.4	4.2	...	...
* MEAN	...	4.2	4.4	4.6	4.7	4.7	4.7	4.7	4.6	4.5	4.4	4.2	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	235	210	210	210	210	200	220	220	230	230	220	...
2	...	...	230	p220c	210	200	220	220	200	220	200	210	...
3	...	240	230	230	230	230	210	210	210	230	210	230	...
4	...	240	240	230	220	220	210	210	210	p210c	220	...	...
5	...	240	220	230	230	210	210	210	210	220	210	...	...
6	...	240	220	220	210	210	200	200	210	200	190	240	...
7	...	240	240	230	230	210	200	210	210	200	220	...	...
8	...	240	220	230	230	210	220	210	200	210	200	...	...
9	...	230	230	220	210	200	210	200	200	200	200	240	...
10	...	240	230	210	200	220	210	200	210	220	200	240	...
11	...	230	220	220	220	210	220	210	200	200	210	240	...
12	...	240	220	230	210	210	220	210	210	205	220	230	...
13	...	230	220	220	210	205	200	210	200	210	210	250	...
14	...	230	220	220	230	p220	p210c	200	200	210	220	p250c	...
15	...	230	210	210	220	200	210	200	200	200	200	235	...
16	...	240	230	220	220	200	200	190	p200c	205	240	240	...
17	...	240	220	220	220	200	210	200	200	200	200	240	...
18	...	230	220	210	220	210	210	200	200	200	190	230	...
19	...	230	210	210	220	200	200	200	200	190	210	240	...
20	...	230	220	220	210	200	200	190	200	210	230	...	...
21	...	230	230	220	210	200	200	200	200	220	220	p240a	...
22	...	230	210	220	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...	240	230	230	220	220	220	220	220	210	220	250	...
24	...	240	240	230	p220c	220	210	210	210	210	180	250	...
25	...	p240c	p240c	240	210	220	220	210	p200c	200	p220c	240	...
26	...	240	240	230	220	210	p190	210	210	220	p230c	240	...
27	...	250	230	210	220	220	210	220	210	200	230	...	...
28	...	250	230	220	220	210	210	210	210	200	220	240	...
29	...	240	220	230	220	230	220	220	210	210	210	...	...
30	...	240	200	230	p230c	p220c	220	210	220	220	220	250	...
31	...	230	220	220	220	215	215	200	210	210	235	...	...
* MEAN	...	237	224	222	218	211	210	207	206	209	213	238	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 254

MARCH 1943 — MARCH 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	1.0	1.1	1.4	1.9	1.8	1.9	1.8	2.0	1.4	1.4	1.2	0.8	1.5	2.6	2.8	3.5	3.7	3.8	3.6	3.8	3.5	3.6	3.1	2.4	1.6
2	0.8	0.8	1.2	p1.5	1.9	1.8	1.9	1.8	2.0	1.8	1.4	1.2	1.2	1.4	2.3	2.8	p3.2c	3.5	3.7	3.7	3.7	3.6	3.5	2.9	2.4	1.6
3	0.9	1.2	1.1	1.4	1.8	1.8	1.8	1.8	1.9	1.9	1.4	1.1	0.8	1.5	2.6	3.0	3.4	3.7	3.8	3.7	3.8	3.6	3.6	3.0	2.4	1.6
4	0.8	1.0	1.8	1.9	1.9	2.0	2.2	2.4	1.4	p1.3c	1.2	1.4	1.2	1.4	2.3	3.0	3.4	3.7	3.7	3.7	3.9	3.6	p3.3c	3.0	2.4	1.6
5	1.0	1.1	1.3	2.1	2.4	2.2	2.6	2.8	2.8	2.4	1.4	1.3	1.4	1.4	2.4	2.9	3.8	3.9	4.0	3.9	4.1	4.0	3.6	3.0	2.4	1.5
6	1.0	1.0	1.4	1.4	2.0	2.3	2.3	2.4	1.5	1.2	1.2	1.2	0.9	1.3	2.4	2.9	3.6	3.7	3.9	3.9	4.0	3.8	3.5	2.9	2.2	1.6
7	1.0	1.2	1.2	1.8	2.1	2.2	2.8	2.4	2.3	2.6	2.3	1.8	1.0	1.4	2.6	3.1	3.7	4.0	3.9	4.0	4.0	3.9	4.0	3.0	2.4	1.5
8	0.8	1.2	1.2	1.8	1.8	2.3	2.3	2.4	2.4	2.0	1.8	1.4	1.0	1.4	2.3	2.9	3.5	3.9	3.9	3.9	4.0	4.0	3.8	3.0	2.6	1.6
9	0.8	0.9	1.3	1.4	1.8	2.3	2.4	2.1	2.2	1.8	1.2	1.1	1.0	1.6	2.3	3.0	3.7	3.6	3.8	4.0	4.0	3.9	3.6	3.0	2.4	1.5
10	1.0	1.2	2.3	1.9	2.2	2.4	2.8	2.8	2.3	1.9	1.5	1.0	1.2	1.4	2.4	3.1	3.6	3.9	3.9	3.9	3.9	4.0	3.5	3.0	2.4	1.6
11	1.0	1.0	1.6	1.4	2.2	2.4	2.3	2.3	2.4	1.8	1.4	1.2	1.0	1.4	2.6	3.0	3.6	3.8	4.0	4.0	4.0	4.0	3.6	3.0	2.6	1.0
12	1.0	1.0	2.3	2.2	2.3	2.4	2.5	2.4	2.3	1.6	1.4	1.2	1.2	1.6	2.5	3.0	3.8	4.0	4.0	3.9	3.9	3.8	3.5	3.1	2.4	1.5
13	1.1	1.2	1.2	2.0	2.0	2.6	2.4	2.4	2.6	2.0	1.5	1.3	1.1	1.4	2.5	3.0	3.6	3.9	3.9	4.3	4.1	4.2	3.6	3.0	p2.4c	1.6
14	1.0	0.8	1.2	2.2	2.2	2.5	2.4	2.6	2.8	1.8	1.4	1.3	1.1	1.4	2.4	3.2	3.7	3.7	3.8	p3.8c	3.6	3.5	3.4	3.4	3.0	2.2
15	1.2	1.0	1.2	1.6	2.2	2.8	2.4	2.6	2.3	2.2	1.6	1.3	1.2	1.4	2.6	3.0	3.6	3.6	3.8	3.8	3.8	3.6	3.4	2.9	2.8	2.2
16	1.2	1.6	2.3	2.4	2.4	2.8	2.4	2.5	2.5	2.2	1.8	1.2	1.2	1.8	2.5	3.0	3.5	3.7	3.8	3.8	3.8	3.6	3.5	3.1	2.6	1.9
17	1.1	1.3	1.4	1.6	2.1	2.7	2.5	2.7	2.0	1.7	1.1	1.2	1.0	1.4	2.6	3.0	3.5	3.8	3.8	3.8	3.8	3.6	3.4	3.0	2.5	1.5
18	1.0	1.0	1.1	2.1	2.3	2.5	2.5	2.5	2.2	2.1	1.4	1.2	1.1	1.5	2.7	3.1	3.6	3.6	3.8	3.8	3.8	3.7	3.5	3.0	2.7	1.5
19	1.0	1.0	1.4	1.7	1.9	2.2	1.8	2.4	2.2	1.8	1.4	1.2	1.0	1.4	2.5	3.0	3.4	3.6	3.8	3.8	3.8	3.7	3.4	3.0	2.4	1.3
20	1.0	1.2	1.3	1.4	1.8	1.9	2.0	2.1	1.8	1.8	1.3	1.2	1.0	1.4	2.4	2.9	3.6	3.6	3.8	3.7	3.7	3.6	3.5	3.1	2.6	p1.3a
21	1.2	1.1	1.4	1.7	1.7	2.0	2.1	1.7	1.9	1.5	1.3	1.1	1.0	1.4	2.4	2.9	3.5	3.6	3.8	3.8	3.7	3.6	3.6	3.0	p2.5a	p1.2a
22	1.0	1.1	1.4	1.6	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.4	2.4	3.0	3.4	...c	...c	...c	...c	...c	...c	...c	...c	...c
23	1.2	1.1	1.4	1.7	1.9	2.0	2.0	2.0	2.0	1.8	1.5	1.2	1.0	1.4	2.4	2.9	3.3	3.6	3.6	3.8	3.7	3.6	3.2	2.8	2.4	1.2
24	1.0	1.0	1.2	1.4	p1.8c	2.1	2.2	2.1	1.9	1.4	1.2	1.0	1.0	1.4	2.4	2.9	3.2	p3.6c	3.7	3.8	3.8	3.6	3.4	3.0	2.4	1.3
25	0.8	p1.1c	1.4	2.2	2.4	2.4	2.4	2.2	p2.0c	1.8	p1.4c	1.1	1.0	1.4	p2.4c	3.1	3.6	3.7	3.8	3.8	3.8	p3.6c	3.4	p2.9c	2.4	p1.3
26	1.2	1.2	1.4	1.8	1.4	2.3	2.3	2.4	2.0	2.0	1.4	1.2	0.9	1.4	2.4	3.6	3.6	3.6	3.7	3.6	3.6	3.5	3.4	p2.9c	p2.6c	1.7
27	1.2	1.7	1.8	1.8	1.8	2.0	1.9	1.9	2.0	1.7	1.2	1.0	1.0	1.5	2.4	3.0	3.5	3.6	3.6	3.7	3.7	3.6	3.6	2.7	2.4	p1.7
28	1.2	1.2	1.2	1.7	1.8	1.9	2.0	1.8	1.8	1.8	1.1	1.0	1.1	1.4	2.4	2.9	3.4	3.6	3.6	3.6	3.6	3.7	3.4	2.8	2.4	1.1
29	1.0	1.9	2.6	2.5	2.4	2.3	2.7	2.8	2.5	2.5	1.8	1.2	1.2	1.4	2.7	2.9	3.4	3.6	3.6	3.7	3.7	3.5	3.4	2.8	2.6	1.7
30	1.2	1.8	2.7	p2.6c	p2.5c	p2.4c	2.2	2.2	1.6	1.6	1.3	1.2	1.0	1.5	2.5	3.0	3.4	p3.5c	p3.6c	3.6	3.6	3.6	3.4	2.8	2.4	1.2
31	1.0	1.2	1.4	1.4	2.0	2.0	2.0	2.2	2.0	1.4	1.3	1.2	1.0	1.4	2.4	2.9	3.4	3.4	3.6	3.7	3.6	3.6	3.3	2.8	2.2	1.2
* MEAN	1.0	1.2	1.5	1.8	2.0	2.2	2.3	2.3	2.1	1.8	1.4	1.2	1.0	1.4	2.5	3.0	3.5	3.7	3.8	3.8	3.8	3.7	3.5	3.0	2.5	1.5

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 255

APRIL 1943 APRIL 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	9.2	10.0	8.6	7.0	6.4	4.9	5.0	8.7	10.1	10.1	9.8	9.0	9.4	10.2	10.7	10.7	10.8	10.7	10.2	10.3	10.3	9.4	11.4c	10.8c	9.3
2	10.3	8.4	6.0	4.4	4.3	3.6	4.3c	6.6	7.5	7.5	7.7	8.2	8.6	9.1	9.9	10.1	9.9	9.6	8.9	6.6	p6.5f	p6.4f	6.3f	6.2f	7.4
3	p6.2f	6.3f	6.3	6.0	4.6f	4.5f	5.1	7.3	8.5	p8.8c	9.0	7.5	7.9	3.3	9.1	10.0	10.1	9.9	9.5	8.5	p8.5c	8.5	8.8	8.6	7.8
4	8.4	8.6	8.4	p6.2c	4.1	3.7	4.3	p5.9c	p7.4c	p9.0c	p9.2c	8.4	8.9	9.1	9.2	9.8	10.2	10.0	9.2	7.5	p7.5a	p7.5a	7.5	7.3	7.8
5	8.0	7.4	6.2	4.5	3.3	2.3	4.2	7.4	8.7	9.1	8.8	8.8	8.3	9.5	9.9	10.1	10.0	10.3	9.6	8.9	9.5	10.3	10.6	8.2	8.1
6	5.8	4.9	3.3	2.4	1.8	2.8	4.1f	7.1	8.8	8.9	7.8	7.5	7.7	8.0	8.7	8.7	9.3	9.7	9.7	9.4	8.8	8.6	8.4	8.0	7.1
7	8.3	8.8	6.2	4.9	3.8	3.1	4.8	7.4	8.7	p9.3	8.8	8.2	8.7	9.6	9.9	10.0	10.1	10.3	9.4	8.5	7.7	6.8	6.8f	6.9f	7.8
8	7.9	8.0	6.0	4.8	3.9	3.3	4.7	7.4	8.2	9.6	9.7	8.0	7.6	8.2	8.3	8.4	8.5	8.7	8.5	6.9f	p7.2f	p7.4f	p7.8f	8.2f	7.4
9	8.4	8.3	5.9	4.5	3.6	2.8	4.0	7.5	8.7	9.3	9.4	7.8	7.4	7.5	7.8	7.8	8.2	7.9	7.5	5.8f	p6.3f	6.8f	8.3	7.8	7.1
10	6.7	6.8	6.8	5.8	5.2	5.1	5.6	7.4	7.9	9.2	9.7	9.3	8.6	8.0	7.9	8.0	8.1	9.0	9.5	8.5	p8.0f	p8.8f	p8.8f	p8.3f	7.8
11	7.8f	7.7f	5.5	4.8	4.8	2.8f	3.8	7.6	9.5	10.4	9.6	9.1	9.1	9.2	10.0	9.9	9.7	9.4	8.8	8.0	7.8	7.7	7.5	7.2	7.8
12	7.7	7.5	7.7	6.8	5.7	4.7	5.0	7.3	9.1	10.3	10.4	9.7	9.3	9.9	10.2	9.9	10.0	9.4	8.7	8.0	7.8	8.2	8.0	7.0	8.3
13	7.0	7.0	6.2	4.4	3.5	2.9	4.3	7.4	8.5	9.5	9.6	9.2	9.7	10.5	11.0	10.7	10.1	9.4	7.3	6.5	p6.8f	7.2	7.5	7.8	7.7
14	8.2	9.7	9.0	6.0	4.2	3.2	4.1	7.0	8.5	8.9	8.4	7.9	8.1	9.0	9.6	9.3	8.9	8.1	6.9	6.2	p6.3f	p6.4f	p6.5f	p6.6f	7.4
15	6.7	7.7	6.9	4.7	3.7	3.1	4.4	6.9	8.6	9.7	10.7	10.6	9.5	9.2	9.4	9.6	9.3	8.3	7.5	6.7	6.7	6.9	6.5	6.6	7.5
16	7.2	8.8	7.4	6.5	6.0	5.5	5.6	6.9	8.6	8.4	7.7	7.6	7.6	8.3	8.8	8.6	8.4	8.0	7.6	6.7	5.8	5.8	6.3	4.6	7.2
17	6.0	6.8	5.2	4.4	4.4	4.4	4.8	7.2	7.9	9.9	9.8	9.3	8.8	9.3	9.7	9.8	10.0	8.5	7.9	7.2	6.8	6.8	p6.4f	5.9	7.4
18	5.8	6.6	6.5	5.6	4.0	2.8	4.1	7.0	8.8	9.4	9.3	8.9	8.2	9.0	9.3	9.0	8.8	8.0	8.2	7.4	7.4	7.2	7.7	7.5	7.4
19	7.4	7.6	6.1	3.6	2.5	2.1	3.8	7.1	8.9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
20	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.3	8.3	8.2	8.6	9.0	9.3	8.9	8.5	8.4	8.0	8.1	7.8	p8.1f	8.4	...
21	8.0	6.1	5.4	4.1	4.5	4.1	4.7	7.3	9.0	10.3	10.1	9.9	9.6	9.5	8.8	8.5	8.7	9.3	9.5	8.4	8.5	p8.2f	7.8f	7.7	7.8
22	6.6	6.6	5.8	5.7	5.0	4.2	5.0	7.9	9.2	9.8	10.2	10.1	9.9	9.5	9.6	9.8	9.9	9.3	9.1	9.2	8.8	8.8	8.3f	8.8	8.2
23	8.3	6.9	5.4	3.0	1.8b	1.5b	3.8	7.0	8.6	9.6	8.9	7.7	7.4	7.6	7.6	7.8	7.9	8.2	8.2	7.4	7.8	7.9	7.6	6.5	6.8
24	6.2	5.1	4.4	2.8	2.1	1.7	3.8	6.8	8.4	9.0	p8.5c	p8.1c	7.6	7.4	7.5	7.7	7.9	8.3	8.2	8.2	7.8	7.9	8.4	7.4	6.7
25	6.8	5.8	4.1	3.6	3.3	3.3	4.8	7.0	8.1	9.2	9.3	8.5	7.9	7.4	7.8	p8.0c	p8.0c	p8.1c	p7.8c	p7.6c	p7.7c	7.8f	p7.3f	p6.8f	6.9
26	p6.3f	5.8	4.7	4.3	5.7f	p5.4c	p6.0c	p7.4c	8.9	9.0	9.5	9.9	9.0	8.4	8.4	8.7	8.5	8.3	7.8	7.3	7.7	7.8	7.6	7.1	7.5
27	7.0	6.3	5.2	4.9	4.5	4.2	4.7	7.0	8.4	9.2	8.7	8.4	8.4	8.3	8.6	9.2	8.8	9.6	8.7	7.8	p7.9c	8.0	7.6	7.5	7.5
28	6.8	5.9	4.9	3.7	3.3	3.0	3.8	6.6	8.3	9.7	p9.2c	8.8	8.5	8.1	8.0	7.7	7.1	7.4	7.6	7.3	6.9	6.9	7.6	7.2	6.8
29	6.9	5.1	p4.6c	p4.0c	3.5	p2.8c	3.2	6.4	8.1	9.6	9.3	7.8	7.4	7.7	7.7	8.0	8.0	8.0	8.1	7.5	7.4	7.1	6.6	6.4	6.7
30	5.3	5.6	5.4	4.8	4.3	4.7	5.4	6.7	8.4	9.8	9.5	8.9	8.4	8.5	8.8	9.1	8.6	7.9	6.7	p6.2c	5.7	p5.9f	6.1	5.6	6.9
31																									
* MEAN	7.3	7.1	6.0	4.8	4.1	3.5	4.5	7.1	8.6	9.4	9.2	8.7	8.5	8.7	9.0	9.1	9.1	8.9	8.4	7.7	7.6	7.6	7.7	7.3	7.5

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 256

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1943 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — APRIL 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED—75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	230	230	240	240	230	250	260	280	320	320	330	310	300	300	320	280	290	280	310	290	280	280	250	277
2	240	230	250	260	290	280	q300c	300	310	340	330	310	310	330	310	300	320	270	280	370	380	380	260	240	300
3	240	260	290	280	270	260	280	270	300	q320c	340	340	380	330	320	290	290	270	290	380	340	280	270	260	298
4	270	250	230	245	240	q240c	260	250	q280c	q310c	q320c	330	340	330	310	290	310	310	280	290	260	310	220	240	280
5	220	220	220	220	250	260	270	290	290	320	320	360	340	300	310	320	310	260	280	280	250	240	220	200	273
6	220	220	240	230	250	180	190	250	270	320	330	330	380	340	300	280	300	250	280	280	280	260	240	230	269
7	220	210	230	230	240	250	250	260	280	q310	340	350	330	330	300	300	290	250	270	310	310	290	270f	240f	278
8	230	220	220	240	240	240	240	260	290	320	325	360	360	350	320	310	290	240	280	400	280a	330	240	235	284
9	230	210	220	220	240	240	260	260	290	330	350	360	380	360	350	330	310	260	290	440f	350	240	230	210	290
10	250	250	240	250	250	250	250	250	250	280	320	330	350	360	340	320	290	270	270	340	q380f	280	300	240	288
11	260	230	230	270	290	430	280	270	290	300	300	330	335	320	325	290	300	250	280	300	280	230	240	260	287
12	240	250	240	240	250	290	260	260	270	300	320	330	330	320	300	300	300	250	270	270	260	270	230	230	274
13	230	230	220	240	240	250	270	240	290	310	310	330	320	310	300	300	310	280	300	360	340	280	230	230	280
14	230	230	240	230	230	250	260	270	290	290	320	340	350	320	310	290	300	250	320	410	350	360	300	250	291
15	250	230	230	210	250	250	270	260	290	300	300	q320c	350	320	320	300	300	250	290	320	290	260	280	260	279
16	240	230	240	260	290	270	280	250	300	320	330	350	350	330	320	310	310	250	280	350	380	250	240	220	290
17	230	200	220	250	230	280	260	260	290	300	320	320	330	350	310	320	330	260	280	310	280	290	250	250	280
18	230	230	210	220	220	230	270	270	290	310	340	360	350	350	340	320	310	260	290	320	280	270	220	230	280
19	230	220	220	220	240	250	270	280	290	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
20	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	320	350	350	350	330	300	320	260	280	290	270	270	270	230	...
21	230	240	230	250	260	240	270	270	300	310	310	330	340	330	330	360	310	260	290	340	330	340	270	230	290
22	240	220	230	240	240	250	260	260	300	330	340	340	360	360	330	330	320	260	270	270	260	260	250	230	281
23	210	210	220	220	230	260	260	260	300	330	330	350	390	370	340	320	310	260	310	350	350	280	220	210	287
24	220	210	210	240	250	280	270	280	310	320	q340c	q360c	380	380	380	330	330	250	290	330	320	300	220	240	293
25	220	210	240	250	290	270	260	270	280	300	350	370	350	390	380	q360c	q340c	q320c	q300c	q340c	350	300	280	290	305
26	260	220	260	300	300	340	280	270	270	300	320	340	360	340	330	340	320	260	320	350	300	260	220	230	295
27	230	240	260	250	270	280	260	270	310	310	340	320	350	340	340	320	330	260	290	340	300	250	230	230	288
28	240	260	240	250	270	280	270	260	320	320	q340c	360	340	350	360	350	q300c	250	280	280	280	300	240	220	290
29	230	240	230	250	320	350	280	250	300	310	340	390	350	350	350	390	310	260	300	340	320	270	230	230	300
30	260	270	280	280	290	250	270	250	300	300	320	360	360	340	320	320	310	270	300	330	350	300	260	230	297
31																									
MEAN*	236	230	235	244	258	267	264	264	291	312	327	343	349	340	327	318	309	263	288	331	311	284	249	236	286

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 257

APRIL 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1943

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.2	4.4	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.3	...	...
2	...	p4.3c	4.7	4.8	4.6	4.6	4.6	4.7	4.6	4.5	4.5	...	...
3	...	...	4.5	p4.6c	4.8	4.6	4.8	4.7	4.5	4.4	4.4	...	...
4	...	...	p4.6c	p4.7c	p4.8c	4.8	4.8	4.6	4.7	4.4	4.5	4.4	...
5	...	4.4	4.5	4.8	4.7	4.7	4.8	4.8	4.7	4.7	4.5	...	...
6	...	...	4.5	4.7	4.6	4.7	4.8	4.5	4.4	4.4	4.4	...	...
7	...	4.3	4.4	p4.5	4.6	4.5	4.6	4.6	4.5	4.4	4.3	...	...
8	...	4.2	4.5	4.6	4.6	4.7	4.7	4.7	4.5	4.5	4.4	...	...
9	...	4.2	4.7	4.7	4.7	4.7	4.7	4.7	4.5	4.5	4.4	...	...
10	...	4.0	4.4	4.6	4.7	4.7	4.8	4.7	4.7	4.5	4.4	...	...
11	...	4.3	4.4	4.5	4.6	4.8	4.7	4.7	4.7	4.4	4.4	...	...
12	...	4.3	4.4	4.7	4.7	4.7	4.7	4.8	4.6	4.5	4.5	...	...
13	...	...	4.6	4.6	4.6	4.7	4.8	4.6	4.5	4.5	4.4	...	...
14	...	4.3	4.5	4.6	4.7	4.7	4.8	4.6	4.6	4.5	4.4	...	...
15	...	4.3	4.7	4.7	4.8	p4.8c	4.7	4.6	4.6	p4.5c	p4.4c	...	...
16	...	...c	...c	...c	...c	...c	4.8	4.7	4.5	4.6	4.4	...	...
17	...	4.3	4.5	4.7	4.7	4.7	4.7	4.7	4.6	4.6	4.4	...	...
18	...	4.3	4.4	4.6	4.7	4.8	4.7	4.8	4.6	4.6	4.4	...	...
19	...	4.3	4.5	...c	...c	...c	...c	...c	...c	...c	...c	...	...
20	...	p4.3c	p4.6c	p4.7c	4.8	4.9	4.7	4.7	4.5	4.4	4.5	...	...
21	...	4.3	4.6	4.7	4.7	4.8	4.8	4.7	4.7	4.6	4.4	...	...
22	...	4.2	4.5	4.8	4.6	4.7	4.9	4.7	4.7	4.5	4.4	...	...
23	...	4.3	4.5	4.5	4.6	4.6	4.7	4.6	4.4	4.5	4.4	...	...
24	...	4.4	4.5	4.6	p4.6c	p4.7c	4.7	4.6	4.5	4.5	4.4	...	...
25	...	4.1	4.4	4.8	4.6	4.7	4.5	4.5	4.5	p4.5c	p4.4c	...	...
26	...	...	4.4	4.8	4.5	4.8	4.7	4.5	4.4	4.5	4.4	...	...
27	...	4.3	4.5	4.7	4.6	4.7	4.7	4.5	4.6	4.7	4.5	...	...
28	...	...	4.6	4.8	p4.7c	4.7	4.5	4.5	4.6	p4.5c	p4.4c	...	...
29	...	...	4.6	4.7	4.8	4.6	p4.6c	p4.7c	p4.7c	4.7	4.5	...	...
30	...	...	4.3	4.7	4.5	4.5	4.5	4.4	4.5	4.5	4.3	...	...
31													
* MEAN	...	4.3	4.5	4.7	4.7	4.7	4.7	4.6	4.6	4.5	4.4	4.4	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	240	230	220	220	220	210	200	200	200	220	...	...
2	...	p240c	p230c	220	200	210	205	200	200	200	250	...	...
3	...	...	240	p230c	220	215	220	210	210	220	250	...	...
4	...	...	240	220	p210c	210	210	p210c	210	210	220	260	...
5	...	240	230	230	220	220	210	p210c	p220c	220	230	...	...
6	...	240	230	230	230	220	220	220	210	190	210	...	...
7	...	250	230	230	230	210	230	210	200	210	220	...	...
8	...	240	230	220	200	210	210	200	210	200	210	...	...
9	...	240	220	220	220	220	220	220	210	200	200	...	...
10	...	...	230	200	220	230	210	220	200	200	230	...	...
11	...	260	250	230	220	210	210	200	200	220	240	...	...
12	...	220	230	220	220	210	210	220	200	210	210	...	...
13	...	240	240	220	220	210	210	210	220	200	230	...	...
14	...	240	230	215	210	200	210	200	200	200	220	...	...
15	...	240	230	p220c	210	p210c	210	210	210	p210c	210	...	...
16	...	...	...c	...	...	...	220	200	200	210	210	...	...
17	...	240	230	220	220	200	200	200	210	210	230	...	...
18	...	230	230	230	210	220	220	200	210	200	210	...	...
19	...	240	230	...c	...c	...c	...c	...c	...c	...c	...c	...	...
20	...	p240c	p230c	p220c	210	210	210	200	210	190	230	...	...
21	...	240	230	220	200	200	210	210	220	230	260	...	...
22	...	250	230	220	210	200	220	200	210	210	240	...	...
23	...	240	230	220	210	200	210	210	200	190	230	...	...
24	...	230	240	220	p210c	p210c	220	210	210	210	220	...	...
25	...	250	230	220	210	210	210	210	220	p230c	p240c	...	...
26	...	250	240	230	220	220	215	210	220	210	240	...	...
27	...	240	230	220	220	210	200	220	210	220	240	...	...
28	...	...	220	p220c	p210c	210	220	p210c	210	210	240	...	...
29	...	...	230	230	210	p210c	p210c	p200c	p200c	200	230	...	...
30	...	...	230	225	200	p200c	p210c	210	p210c	220	230	...	...
31													
* MEAN	...	241	232	222	214	211	213	208	208	208	228	260	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f°F2 EQUAL TO OR LESS THAN f°F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 258

APRIL 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1943

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	1.2	1.4	1.4	1.5	1.7	2.0	2.1	2.2	2.0	2.1	1.2	1.0
2	0.6	1.4	1.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
3	1.3	1.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
4	...c	...c	...c	...c	...c	...c	...c	...c	2.2	1.8	1.4	1.2	0.9
5	1.0	1.2	1.3	1.8	2.0	2.0	2.4	p2.3c	2.2	1.4	1.2	1.2	1.3
6	1.0	1.2	1.3	1.7	2.0	2.0	1.4	2.0	1.9	1.4	1.3	1.2	1.0
7	1.0	1.4	1.4	1.3	1.9	2.1	2.1	1.4	2.0	1.8	1.4	1.2	1.1
8	0.9	1.2	1.2	1.7	1.8	2.0	2.0	2.0	2.0	1.8	1.4	1.3	1.0
9	1.2	1.3	1.2	1.4	1.4	2.2	2.0	2.0	1.9	1.0	1.4	1.2	0.8
10	0.8	1.0	1.0	2.1	2.1	2.2	2.3	2.2	1.9	1.8	1.4	0.9	1.2
11	1.0	1.2	1.0	1.4	2.0	2.2	2.1	2.3	2.0	1.4	1.3	1.2	0.9
12	1.1	1.0	1.0	1.4	1.4	1.9	1.9	2.2	1.4	1.8	1.2	1.2	0.8
13	0.8	1.0	1.1	1.4	1.4	1.4	1.9	1.5	1.4	1.4	1.1	0.9	0.9
14	0.8	1.0	1.2	1.2	1.3	2.6	1.0	1.0	1.4	1.3	1.3	1.2	1.0
15	0.8	1.3	1.6	p1.4c	1.3	p1.3c	1.4	2.1	1.4	1.4	1.4	1.4	0.8
16	0.9	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.2	1.0	1.2	1.0
17	1.2	1.3	1.3	1.4	1.8	1.3	1.1	2.0	2.0	1.2	1.2	1.2	1.0
18	1.2	1.3	1.2	1.2	1.4	1.9	1.4	2.2	2.1	1.9	2.0	1.6	1.0
19	1.1	0.9	0.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
20	...c	...c	...c	...c	1.7	1.8	1.7	2.2	2.3	1.8	1.4	1.0	0.8
21	1.2	1.0	1.6	2.1	2.1	2.3	2.3	2.2	2.4	2.2	1.9	1.1	1.1
22	1.2	1.3	2.3	1.6	2.5	2.3	2.0	2.4	2.0	1.7	1.3	1.2	0.8
23	1.2	1.2	1.2	1.6	2.0	2.2	2.2	2.0	2.2	1.8	1.4	1.2	1.1
24	1.1	1.2	1.4	2.7	p2.6c	p2.4c	2.4	2.4	2.1	1.7	1.4	1.2	1.0
25	1.2	1.0	2.1	1.8	2.1	1.7	2.2	2.1	1.8	...c	...c	...c	...c
26	p1.4c	1.5	1.7	1.7	2.2	2.0	2.1	1.8	1.7	1.7	1.4	1.4	0.9
27	0.9	1.5	1.9	2.2	2.7	2.8	2.7	2.7	2.6	2.3	1.6	2.2	1.0
28	1.4	1.5	2.0	2.3	p2.1c	1.9	1.8	1.9	1.7	1.4	1.2	1.2	1.0
29	1.0	1.2	1.3	1.6	1.9	2.0	2.1	2.2	2.0	1.3	1.1	1.3	1.2
30	1.2	1.2	1.3	1.4	2.0	1.9	1.9	1.9	1.5	1.3	1.2	1.2	1.0
31													
* MEAN	1.1	1.2	1.4	1.6	1.9	2.0	1.9	2.0	1.9	1.6	1.4	1.2	1.0

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.4	2.4	2.9	3.2	3.6	3.6	3.4	3.5	3.6	3.5	3.6	2.4	1.2
2	1.8	p2.4c	p2.9c	3.5	3.1	3.8	3.7	3.7	3.7	3.0	3.5	p2.3c	p1.1c
3	1.3	2.4	3.4	p3.6c	3.7	p3.7c	3.8	p3.7c	3.7	3.8	3.5	p2.2c	p1.2c
4	...c	...c	...c	...c	...c	3.6	p3.6c	p3.7c	3.6	3.2	3.0	2.2	1.2
5	1.4	2.4	3.0	3.6	3.8	3.8	3.7	p3.8c	p3.6c	3.5	3.1	2.2	1.5
6	1.2	2.3	2.7	3.4	3.8	3.9	3.7	3.8	3.5	3.1	3.2	2.2	1.2
7	1.4	2.3	2.8	3.4	3.7	3.8	3.7	3.7	3.4	3.1	2.8	2.2	1.1
8	1.4	2.5	3.0	3.4	3.4	3.9	3.6	3.8	3.6	3.4	2.7	2.3	1.3
9	1.4	2.5	3.0	3.6	3.8	4.0	3.8	3.9	3.8	3.2	3.7	2.3	1.3
10	1.4	2.4	2.8	3.5	3.6	3.8	3.8	3.6	3.5	3.1	3.0	3.1	1.2
11	1.4	2.3	2.8	3.5	3.6	3.6	3.5	3.5	3.5	3.0	2.8	2.1	0.9
12	1.4	2.4	3.0	3.4	3.6	3.5	3.9	3.8	3.5	3.1	2.6	2.2	0.8
13	1.8	2.4	2.8	3.4	3.4	3.6	3.6	3.5	3.5	3.1	2.7	2.1	1.1
14	1.3	2.4	2.8	3.3	3.2	3.3	3.4	3.4	3.4	3.0	2.7	2.2	1.0
15	1.4	2.3	3.2	p3.4c	3.7	p3.6c	3.6	3.7	3.5	p3.1c	2.8	2.5	1.3
16	1.4	2.4	p3.0c	p3.4c	p3.8c	p3.7c	3.8	3.6	3.4	3.0	2.7	2.1	1.1
17	1.4	2.5	2.7	3.5	3.8	3.6	3.7	3.5	3.8	3.2	2.7	2.1	1.0
18	1.4	2.3	3.1	3.3	3.5	3.3	p3.4c	3.5	3.6	3.1	2.8	2.4	1.0
19	1.4	2.4	2.9	..c	...c	...c	...c	...c	...c	...c	...c	...c	...c
20	...c	...c	...c	...c	3.7	3.8	3.6	3.5	3.5	3.0	2.8	2.2	1.1
21	1.4	2.5	3.5	3.5	3.6	3.6	3.6	3.6	3.4	3.2	2.4	2.2	1.1
22	1.6	2.5	3.1	3.5	3.7	3.8	3.6	3.6	3.7	3.0	2.8	2.1	1.2
23	1.5	2.4	2.8	3.5	3.6	3.7	3.6	3.8	3.5	3.1	2.6	2.2	2.1
24	1.4	2.4	2.9	3.4	p3.6c	p3.7c	3.6	3.6	3.6	3.0	2.9	2.2	1.5
25	1.4	2.5	3.0	3.5	3.6	3.6	3.7	3.6	3.6	...c	...c	...c	...c
26	p1.5c	2.1	2.8	3.4	3.6	3.5	3.6	3.5	3.5	3.0	2.4	1.8	1.2
27	1.5	2.2	2.8	3.4	3.6	3.8	3.6	3.8	3.5	3.2	2.8	2.4	1.2
28	1.4	2.3	2.8	p3.4c	p3.6c	3.6	3.6	p3.6c	3.7	3.0	2.7	2.0	1.0
29	1.3	2.3	2.8	3.6	p3.6c	p3.6c	3.5	p3.4c	p3.2c	3.0	2.7	2.1	1.2
30	1.3	2.4	2.8	3.0	3.4	3.6	p3.5c	3.5	p3.2c	3.0	2.6	2.0	1.0
31													
* MEAN	1.4	2.4	2.9	3.4	3.6	3.7	3.6	3.6	3.5	3.1	2.9	2.2	1.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 259

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1943 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MAY 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	5.6	6.6	5.2	4.2	4.3	4.0	4.7	7.4	8.3	p7.8c	7.3	7.4	7.7	7.7	7.2	7.1	7.3	7.5	6.7	5.6	5.5	4.8	5.2	5.2	6.3
2	4.8	4.1	3.7c	3.7	3.6c	2.8	3.8	6.5	8.3	9.3	8.3	7.2c	7.6	8.3	p8.1c	p8.3c	p8.5c	p8.6c	p8.6c	p8.5c	p8.4c	6.4	7.2	5.8	6.8
3	5.2	4.4	3.5	3.3	3.0	2.5	3.8c	6.5	7.5	7.2	7.1	7.3	7.4	7.6	8.1	9.8	10.2	9.0	8.7	7.9c	8.6	8.5c	7.2	6.3	6.7
4	4.0	3.1	3.4	3.5f	p3.4f	p3.3f	3.2	6.5	8.2	8.6	7.0	6.0	6.8	7.3	7.4	7.7	8.8	8.6	8.5	8.0	8.6	8.2	7.7	5.0	6.4
5	3.7c	3.4c	3.3	3.1	p3.1f	p3.2f	3.2	6.5	7.5	8.5	7.1	6.9	6.5	6.7	7.0	7.6	7.8	8.5	7.9	7.8	p7.0c	8.4c	7.1	4.6	6.1
6	4.0	3.0	2.2b	1.6b	1.4b	1.2b	3.2	5.6	6.7	6.7	6.4	6.3	6.4	6.7	7.3c	7.8	7.7	7.7	7.6	7.0	6.9	7.5	7.4	6.0	5.6
7	5.3	4.1	2.8	2.5	2.2	2.0	3.6	6.5	7.9	8.3	7.9	6.7	6.5	6.6	6.7	6.6	6.6	6.9	6.4	5.4	5.3	5.5	5.9	5.0	5.6
8	4.8	4.7	3.7	2.8	2.3	2.0	3.3	5.9	7.7	8.0	7.8	7.4	6.5	6.5	6.9	6.8	6.8	6.7	6.5	6.8	6.0	6.5	6.7	6.4	5.8
9	5.4	4.4	3.5c	2.8	2.2	1.6	3.3	6.0	7.2	7.5	6.8	6.9	6.9	6.9	6.9	7.5	7.3	6.9	6.6	5.8	5.2	6.1f	5.7c	4.9	5.6
10	4.4	3.7	3.5	3.0	2.9	2.5	3.7	6.3	7.8	8.9	8.4	7.3	7.0	7.0	7.0	7.0	7.0	7.0	6.4	5.7	4.7f	4.3	5.0f	6.0	5.7
11	6.9	5.8	5.1	4.4	3.8	3.4	3.2	6.0	7.5	7.9	7.7	7.7	7.6	7.3	7.3	7.7	7.4	6.8	7.3	7.1	6.8c	7.2c	6.5	6.4c	6.4
12	p6.3c	6.2	6.9	5.3	4.7	4.4	3.1	5.8	7.0	7.5	7.6	7.7c	7.9	7.1	6.8	6.7	7.1	7.2	7.0	7.1	7.5	7.3c	p6.5c	5.7c	6.5
13	4.4	4.5	4.6	3.6c	3.0	2.8	4.3	6.0	7.1	7.7	7.6	7.8	7.7	8.2	8.3	8.1	8.1	6.8	6.6	6.9	7.3	6.7c	7.0c	6.6c	6.3
14	6.5	6.2	4.9	4.1c	4.2c	2.8	4.0c	6.4	8.0	8.8	7.7	7.3	7.1	6.7	7.5	8.0	7.8	7.4	7.0	6.8	7.0	p6.8c	p7.2c	p6.6c	6.5
15	p6.2f	p5.7f	p5.8f	5.8c	5.5	5.3	4.2c	6.3	7.5	8.3	7.6	7.2	6.8	7.2	7.4	7.3	7.4	7.5	7.9	7.5	6.8	8.1	7.4c	5.7	6.8
16	5.7c	5.5	5.2c	4.9c	5.1c	3.9c	4.8c	5.7	p6.8c	8.1	8.4	7.7	6.3	6.4	7.8	8.2	8.8	9.2c	8.2c	7.2	7.0	8.1	7.5	6.8	6.8
17	6.8	6.8	p5.4c	4.7	p4.5c	4.0c	5.8c	8.4c	p8.0c	p7.1c	7.0	7.1	7.2	7.4	7.4	7.3	7.2	6.7	7.2	7.0c	6.5	7.2c	p5.7c	5.6c	6.6
18	6.2c	5.3	5.6	5.6	4.7	3.9	4.6	6.4	7.9	8.3	7.5	7.0	7.0	7.0	7.1	7.8	8.1	8.0	7.6c	7.2	p6.5c	p6.0c	5.2	5.2	6.5
19	6.3c	6.6	6.3	5.3	5.0	4.3c	3.0	5.8	7.9	8.5	8.1	7.5	7.5	7.6	7.5	7.4	7.0	7.1	7.4	7.4	7.7	6.8	p6.0c	5.2	6.6
20	5.6	5.2	4.9	4.3	3.9	3.8c	4.4	6.3	7.2	7.4	6.3	6.7c	p6.4c	6.2	6.5	7.3	7.8	7.5	7.4c	7.1c	6.8	6.7c	5.6c	4.8	6.1
21	4.7	4.1	4.1	3.2	3.0	2.7	3.9	6.3	7.1	8.3	p7.6c	p6.9c	6.5	6.5	p6.7c	p6.8c	7.0	7.0	7.0	p5.9c	6.3c	6.8	6.4	4.6c	5.8
22	3.9	3.3	2.7	2.2	2.0	1.9	p3.4c	5.8	7.7	8.0	7.9	7.1	6.6	7.2	7.5	7.5	7.8	7.8	7.4	6.3	6.2c	p6.3c	p6.5c	5.2	5.8
23	4.9	5.1	5.1	p4.8c	3.5	3.0	3.7	5.8	6.9	7.3	8.0	6.9	6.2	6.6	6.8	7.3	7.3	7.0	6.9	7.3	p7.0c	p5.8c	4.9c	p5.0f	6.0
24	p5.0f	4.9	4.5	p2.7f	p2.6f	p2.5f	3.7	6.2	6.9	p7.5c	7.8	7.1	6.9	7.0	6.6	6.4	6.4	p6.3c	6.2	4.9	5.1c	5.5c	5.5	5.2	5.6
25	4.2	4.3	4.3	p4.5c	4.7	p3.8f	2.8	5.0	p6.3c	6.7	7.3	7.6	6.5	6.7	p6.6c	6.5	6.8	7.3	7.5	7.0	6.9	7.1	6.5	4.7	5.9
26	4.6	4.3	3.9	3.7	p3.5f	3.3	3.5	5.4	6.8	6.9	6.7	6.3	6.1	6.6	6.0	6.8	7.2	7.4	6.8c	p6.4c	5.5	5.9	6.0	4.4	5.6
27	3.7	3.0	3.1	2.7	p2.7f	p2.8f	2.9	5.5	p6.4c	6.7	7.7	6.8	6.8	7.0	6.7	7.1	7.6	7.9	7.2	7.0	7.4	6.9	4.9	4.7	5.6
28	4.9	5.3	p5.0f	p4.8f	p4.6f	p4.4f	4.3	6.2	7.4	p7.6c	8.1	8.2	8.2	7.5	7.0	6.8	6.9	6.7	5.5	4.5	4.5	5.0	4.0c	3.8	5.9
29	3.8	4.2	4.7	p4.3f	3.1	3.0	3.7	5.1	6.5	6.9	6.5	6.5	6.6	6.5	6.4	6.2	6.1	6.0	5.9	p5.5c	4.8	5.0c	4.7	4.6	5.3
30	4.6	4.7	4.6	4.0	3.6	3.8	3.0	5.5	6.5	6.9	6.9	7.2	7.0	7.5	7.6	7.3	7.2	6.7	6.3c	6.0	6.5	6.6	5.4	3.3	5.8
31	3.0	3.5	3.7	3.0	p3.2f	3.1	3.8	5.7	6.8	6.8	7.1	7.1	7.0	7.3	6.8	6.5	7.1	7.4	7.2	7.3	6.8	6.4	5.5	5.0	5.7
MEAN*	5.0	4.7	4.4	3.8	3.5	3.2	3.7	6.1	7.3	7.7	7.4	7.2	6.9	7.1	7.1	7.3	7.5	7.4	7.1	6.7	6.6	6.7	6.1	5.3	6.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 260

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1943 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS MAY 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	240	250	240	270	260	250	260	250	310	q320c	340	350	370	330	360	330	340	270	310	350	320	280	240	240	295
2	240	q260c	q290c	q270c	240	260	280	260	310	330	340	380	350	330	q340c	q320c	q320c	q300c	q280c	q270c	q250c	230	220	230	288
3	230	240	230	260	250	270	q270c	280	320	340	360	360	320	340	320	310	280	270	300	q290c	250	q230c	220	220	282
4	220	250	280	280	280	260	270	240	300	310	340	380	360	370	370	320	300	250	280	270	240	220	210	220	284
5	q230c	q230c	280	300	270	270	260	270	300	330	330	350	380	380	350	320	310	250	260	270	q260c	230	210	220	286
6	230	240	q250b	q280b	q280b	q300b	270	250	340	360	380	380	380	340	330	330	300	260	300	290	250	230	220	220	292
7	220	230	260	280	270	260	250	280	300	330	350	380	400	430	440	330	350	260	310	340	320	290	250	230	305
8	240	220	230	250	260	270	270	250	290	340	380	330	400	390	400	350	330	250	300	270	240	230	220	230	289
9	220	230	230	240	260	270	260	270	310	340	400	390	380	380	380	320	320	260	300	350	340	260	200	220	297
10	220	230	230	240	250	250	250	290	300	330	370	370	410	400	370	360	350	260	300	350	340	270	260	230	301
11	220	230	230	240	270	300	260	290	320	330	370	390	370	380	410	360	250	250	270	270	260	q240	q240	q240	291
12	250	240	220	q260c	280	320	280	260	350	q360c	370	q380c	390	410	400	360	330	250	260	270	250	q240c	q220c	220	299
13	220	230	230	q230c	240	240	240	240	280	350	360	390	360	360	330	370	330	270	280	280	280	250	250	240	285
14	230	230	250	280	220	270	250	260	300	330	360	370	400	360	360	350	340	260	280	280	290	280	280	290	297
15	300	290	270	250	250	270	280	300	q340c	320	360	360	380	400	380	330	340	270	280	290	260	250	230	240	302
16	250	240	250	220	230	260	280	250	q290c	330	350	340	430	390	350	320	340	260	310	340	320	290	250	270	298
17	230	230	260	280	280	310	270	260	q300c	340	370	390	380	370	360	360	350	270	280	320	270	260	q240c	250	301
18	260	250	250	250	260	260	270	290	320	330	350	330	400	390	350	340	310	260	290	250	260	270	250	250	293
19	270	260	250	250	290	280	270	300	310	330	360	360	390	380	380	340	320	260	260	270	250	230	240	240	295
20	230	220	240	270	280	250	250	290	310	380	370	380	410	420	380	360	350	270	260	270	240	230	230	240	297
21	240	240	240	280	270	280	250	280	320	360	q360c	q400c	420	q400c	q380c	370	310	240	280	300	270	230	220	220	298
22	240	230	260	270	290	280	250	280	300	330	360	420	420	380	360	310	300	280	270	280	270	270	230	230	296
23	230	230	240	250	260	280	260	240	310	340	370	420	400	440	370	330	320	250	280	260	q280c	q340c	370	300	307
24	260	250	240	270	280	270	270	260	310	q340c	370	400	390	370	380	380	370	270	310	320	280	260	240	250	306
25	250	260	260	q260c	330	330	290	260	360	320	350	400	370	380	q380c	390	340	260	250	260	260	230	220	230	302
26	240	260	260	300	260	240	270	250	310	320	370	370	400	390	340	390	330	300	280	360	340	240	230	230	303
27	240	240	260	270	330	350	260	300	q330c	320	360	360	420	350	400	320	320	290	260	290	290	290	290	270	309
28	300	290	280	240	250	260	240	280	300	320	360	390	400	360	360	340	250	310	370	340	250	260	270	270	304
29	250	260	270	270	270	290	240	330	350	370	420	400	420	430	320	310	340	270	q340c	320	340	310	260	230	317
30	200	200	250	270	280	260	240	340	320	360	360	380	340	330	340	310	240	260	240	240	230	210	230	240	292
31	240	240	260	300	290	270	250	280	300	360	360	360	390	375	400	335	300	290	250	240	230	220	230	230	292
MEAN*	240	242	251	264	269	275	262	274	313	338	363	376	388	379	366	341	319	267	285	294	275	254	241	240	296

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 261

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.4	p4.5c	4.5	4.5	4.5	4.4	4.5	4.4	4.4	...	...
2	...	...	4.8	4.6	4.7	4.7	4.6	4.5	p4.6c	p4.5c	p4.4c	...	...
3	...	4.2	4.8	4.7	4.6	4.7	4.4	4.6	4.7	4.6	4.4	...	...
4	...	...	4.4	4.7	4.6	4.6	4.6	4.6	4.5	4.4	4.3	...	...
5	...	4.3	4.6	4.4	4.4	4.5	4.4	4.6	4.4	4.5	4.4	...	...
6	...	...	4.5	4.4	4.6	4.5	4.5	4.4	4.3	4.5	4.4	...	...
7	...	4.3	4.7	4.8	4.5	4.5	4.4	4.5	4.3	4.4	4.4	...	...
8	...	...	4.5	4.3	4.5	4.5	4.3	4.3	4.3	4.5	4.3	...	...
9	...	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.3	...	...
10	...	4.3	4.6	4.5	4.5	4.5	4.5	4.6	4.4	4.6	4.5	...	...
11	...	4.3	4.7	4.6	4.7	4.8	4.5	4.5	4.5	4.5	4.3	...	...
12	...	...	p4.3	p4.5c	4.5	p4.6c	4.6	4.5	4.4	4.6	4.4	...	...
13	...	...	4.3	4.5	4.7	4.6	4.5	4.5	4.5	4.7	4.6	...	...
14	...	...	4.4	4.4	4.5	4.5	4.5	4.6	4.5	4.6	4.6	...	...
15	...	4.3	p4.5c	4.6	4.6	4.5	4.5	4.5	4.7	4.4	p4.4c	...	...
16	...	...	p4.6c	4.6	4.6	4.5	4.7	p4.5c	4.6	4.6	p4.3c	...	...
17	...	...	p4.5c	4.5	4.6	4.6	4.6	4.5	4.6	4.5	4.4	...	...
18	...	4.3	4.5	4.5	4.4	4.5	4.7	4.6	4.4	4.5	4.4	...	...
19	...	4.4	4.4	4.6	4.4	4.5	4.5	4.5	4.5	4.4	4.4	...	...
20	...	4.3	4.4	4.5	4.4	4.4	4.7	4.4	4.4	4.4	4.5	...	...
21	...	4.3	4.5	4.3	p4.5c	p4.5c	4.6	p4.5c	p4.4c	p4.4c	4.3	...	...
22	...	4.3	4.4	4.5	4.6	4.4	4.6	4.5	4.5	4.3	4.4	4.3	...
23	...	...	4.5	4.6	4.3	4.4	4.5	4.5	4.4	4.3	4.3	...	...
24	...	...	4.6	p4.5c	4.5	4.4	4.5	4.6	4.4	4.5	4.4	...	...
25	...	...	4.3	4.4	4.4	4.4	4.5	4.4	p4.0c	4.3	4.3	...	...
26	...	...	4.4	4.2	4.4	4.4	4.4	4.4	4.3	4.3	4.2	4.3	...
27	...	4.2	p4.3c	4.3	4.3	4.3	4.5	4.3	4.6	4.3	4.3	4.2	...
28	...	...	4.1	4.3	4.8	4.5	p4.5c	4.4	4.2	4.2	4.1	...	...
29	...	...	4.3	4.2	4.4	4.5	4.4	4.3	4.3	4.2	4.1	4.0	...
30	...	...	4.4	4.2	4.5	4.4	4.5	4.3	4.4	4.2	4.2	...	...
31	...	4.1	4.2	4.3	4.4	4.3	4.4	4.3	4.5	4.1	4.0	4.0	...
MEAN*	...	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.4	4.2	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	240	p230c	220	210	190	180	200	200	260	...	...
2	...	...	240	215	215	210	210	210	p210c	p210c	p250c	...	...
3	...	250	230	230	210	200	200	200	220	220	235	...	...
4	...	...	230	220	p200c	p200c	p210c	p200c	p210c	210	230	...	...
5	...	240	235	200	p200c	p200c	210	200	200	220	230	...	...
6	...	...	220	200	200	200	210	200	200	190	240	...	...
7	...	250	230	210	190	190	200	190	200	190	210	...	...
8	...	...	230	200	190	200	200	190	210	190	220	...	...
9	...	240	230	210	210	p200c	200	210	200	190	210	...	...
10	...	240	240	p210c	200	200	200	p210c	p210c	220	210	...	...
11	...	250	220	220	p220c	220	p200c	p200c	p200c	220	220	...	...
12	...	...	...	p220c	p210c	p210c	p200c	p200c	p200c	200	220	...	...
13	...	...	220	220	200	p200c	p200c	p200c	p190c	210	230	...	...
14	...	p190	230	220	200	p210c	p220c	p210c	p210c	210	240	...	...
15	...	250	220	220	p230c	p230c	230	210	210	220	240	...	...
16	...	240	220	210	220	p220c	p220c	p220c	p220c	190	230	...	...
17	...	270	220	p230c	230	p220c	p220c	220	220	220	210	...	...
18	...	240	230	p240c	p220c	p210c	p210c	p210c	p220c	p220c	240	...	...
19	...	240	230	220	p210c	p200c	p200c	p200c	p210c	210	230	...	...
20	...	230	220	p225c	p215c	p210c	p210c	p200c	p200c	210	250	...	...
21	...	250	230	225	p220c	p215c	p210c	p215c	p220c	250	220	...	...
22	...	230	230	200	p210c	p240c	p230c	p230c	p210c	210	230	270	...
23	...	...	220	200	230	p230c	p230c	p240c	p200c	220	210	...	...
24	...	...	230	p210c	p200c	p220c	p210c	p210c	p200c	220	240	...	...
25	...	...	240	220	210	p220c	p200c	p210c	p220c	220	240	...	...
26	...	...	230	210	230	200	p200c	205	200	200	240	250	...
27	...	240	p230c	210	200	210	p200c	p240c	220	210	240	250	...
28	...	...	230	220	p200c	p220c	p210c	210	210	210	230	...	...
29	...	...	210	220	210	210	210	220	210	210	210	250	...
30	...	...	220	220	200	220	p210c	p200c	210	190	190	...	...
31	...	240	220	210	220	210	210	200	200	215	230	240	...
MEAN*	...	241	220	216	210	211	208	208	208	210	229	252	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 262

MAY 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1943

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	1.0	0.9	p1.4c	1.8	1.8	1.7	1.8	1.3	1.2	1.2	1.0	0.8
2	1.1	1.2	1.4	1.4	1.8	p1.6c	1.8	1.8	p1.8c	p1.5c	p1.2c	p1.1c	p0.8c
3	0.8	1.2	1.2	1.3	1.8	1.9	1.8	1.8	2.1	1.8	1.3	1.2	0.8
4	0.7	1.0	1.2	1.2	1.8	1.9	2.0	1.8	1.3	1.3	1.0	1.2	0.8
5	1.0	1.2	1.2	1.3	2.0	2.1	2.1	1.9	1.7	1.3	1.1	1.1	0.8
6	0.8	1.2	1.2	1.8	1.8	2.0	1.8	1.4	1.7	1.2	1.1	0.8	0.8
7	0.8	1.1	1.5	1.8	1.8	1.8	1.8	1.7	1.8	1.2	1.1	0.9	0.8
8	0.8	0.9	1.1	1.1	1.8	1.7	1.1	1.1	1.1	1.1	1.1	0.9	0.8
9	0.8	0.8	1.1	1.3	1.8	1.8	1.8	1.8	1.2	1.3	1.1	0.8	0.8
10	0.9	0.8	1.3	1.8	1.8	1.7	1.8	1.8	1.8	1.1	1.1	1.1	0.9
11	0.8	1.0	1.1	1.6	1.6	1.6	p1.7c	1.8	1.8	1.2	1.0	1.0	0.8
12	0.8	1.0	1.0	1.3	1.1	1.1	1.0	1.7	1.8	1.3	1.0	0.9	0.8
13	1.1	1.2	1.8	1.3	1.1	1.1	1.8	1.8	1.8	1.3	1.1	0.9	0.8
14	1.2	1.2	1.4	1.7	2.0	2.0	1.9	p2.0c	1.9	1.8	1.2	1.0	0.8
15	p0.9	1.2	1.4	1.8	1.8	2.2	2.0	2.1	1.9	1.8	1.0	0.9	0.9
16	p1.1c	1.2	1.3	1.8	1.8	2.0	1.8	1.8	2.5	1.4	1.4	1.0	0.8
17	1.0	0.9	1.4	p2.0c	2.0	2.1	2.1	2.0	1.8	1.8	1.1	0.9	0.9
18	1.0	0.9	1.1	1.4	1.9	1.8	1.9	1.8	1.3	1.3	1.1	0.9	0.8
19	0.9	0.9	1.2	1.5	2.1	2.1	2.1	2.0	1.8	1.9	1.2	0.9	0.8
20	0.9	1.1	1.1	1.3	1.4	2.0	2.0	1.8	1.9	1.3	1.1	1.0	0.8
21	1.0	1.1	1.2	1.2	p1.6c	p1.8c	2.1	p1.8c	p1.8c	1.8	1.4	1.3	1.0
22	p1.0	1.7	1.6	1.7	1.8	1.7	1.8	1.8	1.7	1.7	1.8	1.5	1.4
23	1.0	1.6	1.4	1.7	1.8	1.7	1.7	1.7	1.8	1.7	1.4	1.6	1.0
24	p1.1	1.7	1.7	p1.7c	1.7	1.8	1.8	1.8	1.7	1.4	1.6	1.3	1.2
25	1.2	1.6	1.6	1.7	1.8	1.7	1.8	1.8	p1.7c	1.6	1.2	1.6	1.4
26	p1.2c	1.2	1.3	1.4	1.8	1.7	1.8	1.8	p1.5c	1.6	1.8	1.6	1.0
27	1.1	1.2	1.6	1.6	1.7	1.6	1.7	1.7	1.6	1.6	1.3	1.6	1.3
28	1.2	1.6	1.8	1.6	1.8	1.8	1.7	1.7	1.7	1.6	1.6	1.6	1.2
29	1.0	1.3	1.3	1.2	1.3	1.4	1.3	1.2	1.2	1.2	1.1	0.9	0.8
30	0.9	1.1	1.2	1.2	1.3	1.4	1.3	1.4	1.2	1.1	1.1	1.1	0.9
31	0.9	1.1	1.2	1.2	1.2	1.2	1.1	1.3	1.1	1.3	1.1	1.1	0.9
MEAN*	1.0	1.2	1.3	1.5	1.7	1.8	1.7	1.7	1.7	1.4	1.2	1.1	0.9

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.4	2.6	2.9	p3.2c	p3.6c	p3.6c	p3.6c	3.6	3.1	2.8	2.4	1.8	0.8
2	1.4	2.2	2.8	3.1	p3.4c	p3.4c	p3.6c	p3.5c	p3.3c	p3.0c	p2.6c	p1.9c	p1.0c
3	1.2	2.3	2.8	3.1	p3.6c	3.6	p3.6c	p3.5c	3.4	3.1	2.8	2.0	1.2
4	1.2	2.3	2.7	3.1	p3.4c	p3.5c	p3.6c	3.6	p3.6c	2.9	2.7	1.9	0.8
5	1.2	2.2	2.8	3.1	p3.4c	p3.5c	3.6	3.5	3.3	3.0	2.7	2.0	1.2
6	1.3	2.3	2.7	3.2	3.3	3.4	3.5	3.6	3.4	3.0	2.8	2.0	1.4
7	1.0	2.3	2.8	3.2	3.5	p3.5c	3.6	p3.5c	3.2	2.9	2.6	1.9	0.8
8	1.2	2.4	2.8	3.2	3.4	3.6	p3.6c	2.9	p3.4c	2.9	2.6	2.0	0.8
9	1.2	2.4	2.8	3.1	3.4	p3.6c	3.7	3.6	p3.5c	3.0	2.5	2.0	0.8
10	1.0	2.3	2.8	p3.4c	3.6	p3.6c	3.8	p3.6c	p3.5c	3.0	2.6	2.0	0.9
11	1.3	2.3	2.9	3.2	3.6	3.6	p3.5c	p3.3c	3.2	3.0	2.5	2.0	1.2
12	1.2	2.3	3.0	2.4	3.5	p3.4c	p3.4c	p3.5c	p3.5c	3.0	2.6	2.0	1.4
13	1.2	2.4	2.8	3.0	3.3	3.2	p3.3	p3.3c	p3.3c	3.0	2.5	1.8	0.8
14	1.2	p2.0	2.8	3.0	3.1	p3.5c	p3.6c	p3.4c	p3.4c	3.0	2.6	1.9	0.8
15	p1.6c	2.2	2.8	3.0	p3.2c	p3.3c	p3.4c	p3.4c	p3.2c	2.5	p2.4c	2.6	p1.4c
16	p1.6c	2.2	p2.9c	3.2	3.4	p3.1c	p3.2c	p3.2c	3.2	2.4	3.1	1.8	1.5
17	1.5	2.2	3.1	p3.2c	p3.4c	p3.2c	p3.3c	p3.3c	p3.2c	2.9	2.5	1.8	0.9
18	1.3	2.2	2.7	3.1	p3.3c	p3.3c	p3.4c	p3.4c	3.5	3.1	2.5	1.9	1.1
19	1.2	2.3	2.8	3.1	p3.3c	p3.5c	p3.4c	p3.3c	p3.2c	3.2	2.7	1.8	0.9
20	1.4	2.3	2.7	p3.0c	p3.2c	p3.3c	p3.4c	p3.6c	p3.3c	2.9	2.7	1.9	1.2
21	1.2	2.2	2.6	2.9	p3.1c	p3.3c	p3.7c	p3.6c	p3.4c	3.3	2.6	1.7	1.0
22	1.6	2.4	2.7	3.0	p3.2c	p3.7c	p3.5c	p3.4c	p3.1c	2.9	2.9	p2.3	1.8
23	1.3	2.2	2.8	3.1	3.4	p3.6c	p3.5c	p3.4c	3.2	3.0	2.4	1.8	1.4
24	1.3	2.4	2.7	p3.1c	p3.4c	3.7	p3.5c	p3.4c	p3.1c	2.4	2.2	1.7	1.2
25	1.4	2.0	2.6	2.9	3.4	3.4	3.5	3.5	p3.2c	2.7	2.3	1.8	1.5
26	1.2	2.2	2.3	2.5	3.3	3.4	p3.4c	3.4	3.0	2.9	2.5	1.8	1.0
27	1.1	1.8	p2.5c	2.9	3.1	3.0	p3.3c	p3.3c	3.2	2.7	2.5	1.7	1.3
28	p1.4	2.2	2.7	3.1	p3.4c	p3.6c	p3.5c	3.4	2.9	2.9	2.4	2.0	1.2
29	1.5	2.3	2.6	3.0	3.4	3.4	3.4	3.4	3.0	2.6	2.4	1.7	1.0
30	1.2	2.1	2.7	3.0	3.3	3.5	3.4	3.6	3.2	2.6	2.6	1.9	0.9
31	1.1	2.2	2.7	p2.8	3.0	3.4	3.3	3.4	2.7	2.7	2.4	2.0	1.0
MEAN*	1.3	2.2	2.8	3.0	3.4	3.4	3.5	3.4	3.2	2.9	2.6	1.9	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 263

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1943 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JUNE 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	4.6	4.4	4.1	3.8	3.3	p3.0f	2.8	5.7	7.1	7.0	6.6	6.9	6.1	6.3	6.5	6.7	8.4	7.6	6.3	5.9	6.9	6.2	4.1	3.4	5.6
2	3.0	2.4	2.1	1.8	1.4	1.4	3.0	5.6	7.2	8.1	7.4	7.0	6.5	6.7	6.6	6.4	7.2	7.5	6.9	6.9	6.7	6.5	5.6	5.4	5.4
3	4.7	4.3	3.8	3.2	2.9	2.8	2.9	5.4	7.1	7.5	6.3	6.0	6.2	6.1	6.5	6.7	6.8	6.7	6.8	6.0	5.9	6.5	5.6	3.5	5.4
4	2.5	2.0	2.3	p1.6b	p1.6b	p1.5b	2.6	5.2	6.6	6.8	6.1	5.4	5.3	5.8	5.8	5.9	6.9	7.7	6.8	6.2	6.5	6.5	p4.8c	3.7	4.8
5	2.9	2.7	3.2	2.7	p2.5f	2.4	3.2	5.5	6.7	7.1	5.9	5.6	5.3	5.8	5.9	6.4	6.8	8.0	7.8	6.4	6.3	6.5	6.2	4.6	5.3
6	4.8	4.5	4.4	4.2	p3.9f	p3.3f	2.8	5.3	6.7	7.4	7.0	6.1	6.0	5.8	6.3	6.6	7.3	7.3	6.9	p6.2c	7.6	7.2	4.8	3.7	5.7
7	3.3	3.2	2.6	2.6	2.3	2.0	3.0	5.5	6.6	6.9	7.6	7.0	5.9	5.8	6.2	6.4	7.0	6.9	6.5	5.6	6.9	6.6	7.0	4.7	5.3
8	4.4	4.2	4.5	4.7f	p4.0f	3.2f	3.9	5.0	6.6	7.5	7.5	7.3	7.2	7.3	7.5	7.8	8.0	7.6	7.1	6.9	6.5	6.6	6.6	6.8	6.2
9	7.0	6.9	7.6	5.7	4.1	2.9	3.4	6.1	6.9	6.5	6.6	6.1	6.8	7.1	7.4	6.8	6.6	6.3	6.1	6.4	7.0	7.1	5.6	4.4	6.1
10	4.5	4.8	5.2	3.9	3.3	3.0	3.5	5.9	6.5	7.1	6.8	6.2	6.1	7.0	7.2	6.9	6.2	6.7	6.5	5.8	6.4	6.1	5.6	4.8	5.7
11	4.4	4.4	5.0	4.4	3.5	3.2	4.1	5.7	6.2	7.2	6.8	6.7	6.8	7.0	7.1	6.9	6.5	6.4	5.9	5.1	5.8	6.4	5.9	4.6	5.7
12	4.6	4.6	4.2	3.5	2.9	p3.0f	3.0	5.5	6.7	7.2	7.5	7.2	7.4	6.8	7.7	7.3	7.0	7.0	5.8	5.6	5.9	5.3	p4.8f	4.2	5.6
13	4.3	3.3	2.9	3.0	2.9	2.9	2.9	5.8	6.8	7.5	7.1	7.0	6.2	7.4	7.1	6.9	p6.8c	p7.0c	p6.9c	p6.7c	6.6	7.6	6.4	7.1	5.8
14	5.5	4.3	4.0	4.1	4.0	p3.2f	2.7	5.0	5.6c	6.2	6.3	6.1	6.3	6.4	6.1	5.8	5.9	6.3	6.6	5.5	5.4	6.3	6.6	5.8	5.4
15	4.4	3.8	3.8	3.7	2.8	2.2	p2.3c	p4.7c	p5.5c	6.0	p5.8c	p5.7c	5.5	5.7	6.2	6.7	6.8	6.7	6.9	5.8	5.6	6.8	5.6	4.1	5.1
16	3.3	2.5	2.2	2.2	2.1	1.9	2.7	5.2	6.2	7.1	6.7	6.3	5.9	5.8	5.7	6.3	6.6	6.6	6.3	5.6	5.7	5.8	5.9	5.5	5.0
17	3.8	3.6	2.9	2.7	2.4	p2.4f	2.4	4.3	5.1	5.8	5.9	5.9	5.9	6.3	6.7	6.8	7.4	7.3	7.6	6.5	6.3	5.8	5.3	4.9	5.2
18	3.6	3.8	3.1	2.2	1.8	1.7	2.4	4.5	5.2	5.6	6.0	6.2	6.0	6.3	6.2	6.7	7.0	6.9	7.0	5.8	5.7	5.8	5.0	4.6	5.0
19	3.4	2.9	2.5	2.5	2.1	2.0	3.0	5.0	6.0	6.3	6.7	6.3	5.4	6.0	6.8	6.7	6.7	7.5	7.4	6.5	p6.4f	p6.3f	6.2f	6.7f	5.3
20	6.6f	4.9	4.1	3.7	3.3	2.7	3.0	5.3	6.4	6.8	6.1	6.3	6.4	6.8	6.8	6.9	6.8	7.8	7.1	6.2	5.7c	5.8c	5.9	4.5	5.7
21	4.8	4.4	4.7	4.1f	3.7f	2.9f	3.1	5.6	7.2	7.3	7.1	6.5	6.6	6.4	6.4	6.6	6.7	6.8	7.5	6.7	6.2	6.5	4.8	4.5	5.7
22	4.4	4.6f	4.3f	4.2f	4.0f	p3.2f	2.5	4.6	6.0	6.6	6.6	5.9	6.2	6.7	6.3	5.8	6.6	6.7	6.6	6.4	5.8c	5.6	5.9	5.8	5.5
23	4.5	4.9	4.5	4.1	4.2	4.0f	2.9	5.3	6.8	6.9	7.2	7.0	7.1	6.1	6.1	7.3	7.2	6.5	6.6	5.8c	5.7	4.9	4.4	4.0	5.6
24	4.0	4.3f	4.5f	4.0f	3.2f	3.1	3.1	4.7	6.0	6.5	6.7	6.4	5.9	5.4	5.9	6.2	6.5	6.3	6.2	5.1c	p4.4f	p4.3f	p4.2f	p4.8f	5.1
25	p4.4f	p3.7f	p4.0f	p3.2f	p4.1f	p3.4f	2.8	5.5	6.7	7.3	6.7	6.0	6.1	6.2	6.3	6.8	7.3	6.5	6.1	5.5	5.9	4.9	4.1	3.5	5.3
26	3.7	4.0	3.8	3.8f	p3.0f	2.1f	2.6	5.1	6.4	6.2c	6.3	6.1	6.0	5.7	6.3	6.6	6.3	6.6	6.5	6.2	5.7	5.4	5.7	5.0	5.2
27	4.5	4.3	4.5f	3.8f	3.6f	2.8f	2.3	4.8	6.3	6.0	6.3	6.3	6.6	6.8	6.7	7.5	6.4	5.8	5.0	4.4	4.6	4.6	3.7	3.7	5.1
28	3.6	3.2	p3.4f	3.6	2.6	2.4f	2.5	5.5	6.8	6.8	6.9	6.8	6.8	6.7	7.1	7.4	7.2	7.6	6.7	7.1	6.1	7.0	4.6c	3.7	5.5
29	3.1	2.8f	p2.6f	2.5f	2.0f	p2.2f	2.4	5.1	5.6	5.9	5.2	5.3	5.7	6.2	6.2	6.2	6.0	5.6	5.5	4.7	5.2	5.6	5.4	4.6	4.6
30	5.0	5.0	5.3	4.8	4.2	3.0	3.4	5.3	6.5	6.3	p6.3c	p6.5c	p6.7c	p6.9c	7.1c	6.9	6.6	p6.8c	6.9	6.4	5.4	6.4	4.0	3.4	5.6
31																									
MEAN*	4.2	4.0	3.9	3.5	3.1	2.7	2.9	5.3	6.4	6.8	6.6	6.3	6.2	6.4	6.6	6.7	6.8	6.9	6.6	6.0	6.0	6.1	5.3	4.7	5.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 264

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1943 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JUNE 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	230	240	280	280	310	260	250	300	340	415	370	380	440	410	350	300	280	280	240	220	220	220	220	294
2	230	240	250	260	270	250	250	260	310	310	370	410	390	350	340	360	320	280	280	270	240	230	230	230	289
3	230	240	260	290	330	290	270	290	320	340	410	430	430	380	370	360	330	260	270	290	250	230	230	230	305
4	245	250	260	290	310	270	270	240	290	350	380	420	450	420	440	380	300	270	260	250	240	210	200	240	301
5	230	240	250	290	260	250	240	290	320	340	420	480	515	450	440	340	320	290	240	270	290	240	210	250	311
6	260	240	250	260	290	q280f	270	310	310	350	380	400	460	420	380	370	300	290	280	250	290	220	220	220	304
7	230	230	250	260	270	260	270	280	310	340	390	400	450	460	370	380	320	300	280	370	280	230	230	250	309
8	230	250	250	340	330	310	240	260	320	330	350	380	420	410	350	380	350	330	290	300	340	270	250	250	314
9	270	270	260	270	240	260	250	290	340	400	390	370	430	380	380	380	230	270	250	260	250	220	220	240	297
10	250	260	280	290	270	240	260	270	300	340	380	440	380	390	370	350	350	270	290	270	260	240	240	230	301
11	240	240	220	260	270	300	270	260	310	340	410	440	400	410	410	360	370	270	280	280	290	270	240	230	307
12	230	240	230	250	310	400	280	290	320	340	370	390	350	360	320	350	370	260	280	280	320	310	250	250	306
13	250	260	280	270	240	270	280	240	290	310	370	410	410	390	370	330	q320c	q310c	q290c	q280c	280	240	240	220	298
14	230	240	260	290	280	270	280	270	350	340	440	440	430	420	400	420	350	250	280	260	280	260	250	250	314
15	250	250	240	250	270	280	q280c	q300c	q320c	350	q380c	q410c	430	400	420	380	310	250	270	240	250	230	210	220	300
16	220	250	260	270	270	300	270	230	290	360	380	520	370	380	440	420	300	250	280	310	260	260	230	220	306
17	230	230	240	250	300	310	260	250	370	420	380	470	450	390	350	390	320	250	240	260	240	240	240	240	305
18	240	230	220	250	240	250	270	230	310	380	390	430	430	390	380	360	350	310	250	270	260	240	230	230	298
19	220	230	240	260	240	250	270	300	310	360	380	400	390	430	360	350	330	290	260	340	380	350	250	240	310
20	240	240	250	240	240	240	260	300	330	360	390	390	410	370	400	370	315	280	270	300	280	q250c	q240c	230	300
21	250	275	270	300	280	260	260	280	310	370	360	390	400	470	340	340	360	240	250	260	250	240	240	250	302
22	280	290	270	270	285	350	240	320	325	365	400	400	440	410	360	340	330	320	260	260	q250c	250	250	225	312
23	240	255	300	300	300	280	280	290	290	330	380	350	355	390	410	370	315	230	250	260	270	300	300	290	306
24	290	280	250	270	280	250	330	270	300	360	360	390	410	410	410	390	350	310	290	370	390	330	290	220	325
25	240	260	270	280	280	270	250	270	290	350	370	410	390	400	430	350	350	320	270	260	270	300	300	290	311
26	260	260	230	260	280	270	260	250	320	q360c	410	350	440	480	380	360	370	250	260	280	290	300	270	270	311
27	260	250	240	240	250	270	270	290	300	340	380	390	420	350	360	330	340	320	290	300	280	280	250	300	304
28	260	240	230	190	280	330	270	270	280	290	370	350	390	420	360	330	290	280	250	260	250	230	q235c	240	287
29	300	320	300	300	340	340	260	280	340	390	390	390	440	400	360	400	340	320	280	260	260	240	230	240	322
30	240	250	230	230	250	230	250	280	290	370	q370c	q380c	q400c	q390c	380	360	320	q300c	270	235	235	210	230	230	289
31																									
MEAN*	246	251	253	269	278	281	266	274	312	351	385	407	415	405	383	365	327	282	270	278	275	255	241	242	305

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1943

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.2	4.2	4.3	4.4	4.4	4.4	4.2	4.2	4.1	4.0	...
2	...	...	4.2	4.2	4.3	4.5	4.3	4.2	4.3	4.2	4.1	4.0	...
3	...	...	4.1	4.2	4.5	4.4	4.4	4.4	4.3	4.3	4.0	4.0	...
4	...	...	4.5	4.2	4.2	4.4	4.3	4.3	4.5	4.2	4.1	4.1	...
5	...	4.0	4.4	4.2	4.4	4.4	4.4	4.3	4.3	4.3	4.2	4.0	...
6	...	4.0	4.1	4.3	4.4	4.5	4.4	4.4	4.3	4.5	4.2	4.0	...
7	...	4.0	4.1	4.2	4.4	4.4	4.6	4.3	4.2	4.2	4.2	p4.0c	...
8	...	...	4.3	4.5	4.5	4.6	4.7	4.5	4.3	4.4	4.3	4.1	...
9	...	3.8	4.3	4.6	4.5	4.5	4.4	4.4	4.4	4.4	...	...	...
10	...	3.7	4.1	p4.3c	4.4	4.3	4.3	4.2	4.2	4.1	4.1	...	...
11	...	3.7	4.1	4.4	4.5	4.7	4.4	4.5	4.6	4.5	4.4	...	...
12	...	3.9	4.2	4.4	4.5	4.5	4.3	4.6	4.2	4.2	4.2	...	...
13	...	...	4.2	4.2	4.5	4.5	4.6	4.4	4.4	4.5	p4.2c	...	...
14	...	...	4.2	4.3	4.7	4.4	4.4	4.3	4.4	4.3	4.1	...	...
15	...	...	p4.2c	4.5	p4.5c	p4.4c	4.4	4.3	4.4	4.2	4.1	...	...
16	...	...	4.1	4.3	4.5	4.8	4.3	4.3	4.4	4.1	4.1	...	...
17	...	...	4.0	4.3	4.3	4.5	4.3	4.3	4.3	4.2	4.2	...	...
18	...	...	4.1	4.3	4.3	4.4	4.4	4.2	4.2	4.1	4.3	4.2	...
19	...	3.8	4.2	4.3	4.4	4.4	4.4	4.3	4.2	4.0	4.2	4.2	...
20	...	3.9	4.4	4.3	4.3	4.3	4.4	4.3	4.5	4.3	4.0	4.0	...
21	...	3.9	4.3	4.3	4.3	4.4	4.3	4.5	4.2	4.0	4.2	...	...
22	...	3.8	4.1	4.2	4.3	4.2	4.3	4.2	4.1	4.0	4.0	3.9	...
23	...	4.0	4.2	4.2	4.3	4.3	4.4	4.5	4.4	4.2	4.1	...	...
24	...	...	4.1	4.2	4.3	4.3	4.2	4.4	4.2	4.3	4.1	4.0	...
25	...	4.0	4.1	4.3	4.4	4.3	4.3	4.2	4.4	4.0	4.2	4.0	...
26	...	...	4.1	4.1	4.4	4.2	4.4	4.4	4.2	4.2	4.4	...	...
27	...	3.9	4.2	4.3	4.3	4.2	4.2	4.1	4.0	4.1	4.2	4.0	...
28	...	3.8	3.9	4.3	4.4	4.3	4.2	4.3	4.2	4.2	4.1	3.9	...
29	...	3.8	4.1	4.2	4.2	4.2	4.2	4.2	4.0	4.1	4.2	3.9	...
30	...	3.8	4.1	4.2	p4.2c	p4.2c	p4.3c	p4.3c	4.4	4.4	4.4	...	...
31	...												
* MEAN	...	3.9	4.2	4.3	4.4	4.4	4.4	4.3	4.3	4.2	4.2	4.0	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	220	210	210	210	210	210	220	240	...
2	...	...	240	210	210	210	210	210	200	210	230	250	...
3	...	...	230	220	210	200	200	210	210	200	210	250	...
4	...	...	230	220	215	210	210	200	190	190	230	250	...
5	...	240	230	220	220	200	210	190	200	200	200	250	...
6	...	260	200	220	210	190	200	210	210	200	215	230	...
7	...	240	240	p220c	200	200	200	p200c	190	210	210	p250c	...
8	...	...	230	220	210	210	200	220	210	210	250	270	...
9	...	250	240	210	210	210	210	210	210	220	p230	...	...
10	...	240	230	220	220	210	210	200	200	200	220	...	...
11	...	240	230	220	210	210	210	210	200	210	220	...	...
12	...	250	230	210	220	200	210	210	220	210	230	...	...
13	...	...	230	220	210	200	220	210	200	220	p220	...	...
14	...	...	230	220	220	210	210	210	210	200	220	...	...
15	...	...	p220c	210	p210c	p200c	200	200	200	220	220	...	...
16	...	...	220	210	210	210	210	200	210	200	210	...	...
17	...	...	230	220	200	210	210	210	210	210	200	...	...
18	...	...	200	210	200	200	210	210	200	205	230	250	...
19	...	230	220	200	200	210	200	200	190	200	220	260	...
20	...	250	230	220	205	210	215	205	200	215	220	240	...
21	...	240	230	220	210	220	210	210	215	220	220	...	...
22	...	250	240	220	220	220	210	210	200	210	220	250	...
23	...	250	240	220	215	220	215	210	210	220	215	...	...
24	...	...	235	210	200	220	215	210	210	210	230	270	...
25	...	250	240	220	230	225	220	220	210	220	230	240	...
26	...	...	230	210	200	210	200	200	210	210	215	...	...
27	...	245	225	200	190	205	210	220	205	210	215	260	...
28	...	240	230	210	200	215	210	215	210	210	220	250	...
29	...	250	240	215	210	200	220	200	200	200	210	260	...
30	...	230	225	205	p210c	p210c	p200c	p210c	220	220	250	...	...
31													
* MEAN	...	244	229	215	210	208	209	208	205	209	221	251	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 266

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1943 JUNE 1943

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.8	1.0	1.1	1.3	1.2	1.4	1.3	1.3	1.3	1.2	1.2	1.2	0.8	1.0	2.2	2.8	2.8	3.6	3.4	3.5	3.5	3.2	2.8	2.4	1.9	1.6
2	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.0	0.9	0.8	1.4	2.2	2.7	3.0	3.3	3.3	3.3	3.3	3.3	2.9	2.5	1.8	1.5
3	0.8	0.9	1.1	1.3	1.4	1.3	1.2	1.2	1.2	1.1	1.1	1.1	0.9	1.2	2.2	2.8	3.1	3.2	3.2	3.0	3.3	3.2	2.9	2.5	1.8	0.9
4	0.8	0.8	1.2	1.2	1.2	1.4	1.2	1.3	1.3	1.1	1.0	1.1	0.8	1.0	2.2	2.7	2.9	3.4	3.4	3.4	3.4	3.2	2.9	2.6	2.1	p1.5
5	0.9	0.9	1.1	1.2	1.2	1.1	1.1	1.3	1.3	1.2	1.1	1.1	0.9	1.0	2.2	2.7	3.2	3.4	3.4	3.4	3.2	3.2	2.9	2.5	2.0	1.0
6	0.8	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.2	1.0	0.8	0.8	1.2	2.2	2.7	2.8	3.6	3.5	3.5	3.5	2.7	2.8	2.5	1.9	1.8
7	0.8	1.1	1.1	1.2	1.1	1.2	1.2	1.1	1.2	1.1	1.1	1.0	p0.9c	1.1	2.4	2.9	2.6	3.2	3.1	3.6	3.6	3.4	3.2	2.5	2.2	0.9
8	1.2	0.8	1.1	1.2	1.3	1.3	1.2	1.1	1.1	1.2	0.8	1.0	0.7	1.2	2.4	2.8	2.9	3.2	3.4	3.4	3.1	3.1	2.7	2.6	2.0	1.2
9	0.9	0.8	1.1	1.2	1.4	1.2	1.1	1.3	1.1	1.1	1.0	0.8	0.6	1.2	2.2	2.8	2.7	3.2	3.5	3.0	3.5	3.0	2.9	2.3	1.8	0.8
10	0.8	1.0	1.1	1.1	0.9	0.6	0.8	0.8	0.[illegible]	0.8	0.9	0.8	0.8	1.1	2.1	2.6	3.1	3.2	3.4	3.5	3.4	3.1	2.6	2.5	1.9	1.1
11	0.8	1.1	1.2	1.3	1.4	1.4	1.2	1.2	1.3	1.2	1.1	0.9	0.8	1.1	2.2	2.7	2.9	3.2	3.4	3.4	3.4	3.2	2.9	2.4	2.3	0.9
12	0.9	0.9	1.1	1.1	1.1	1.1	1.3	0.9	1.1	1.0	1.0	0.9	0.8	1.2	[illegible]	2.7	3.1	3.2	3.4	3.4	3.5	3.1	2.9	2.7	1.7	0.8
13	0.6	0.8	1.2	1.1	1.0	1.0	1.2	1.2	1.2	p1.0c	p1.0c	p0.8c	p0.7c	1.1	2.2	2.7	2.9	3.2	3.1	3.5	3.4	3.0	3.5	p2.6c	p1.8c	p1.0c
14	0.8	1.2	1.2	1.3	1.2	1.1	1.0	1.2	1.1	1.1	1.0	0.7	0.6	1.1	2.1	2.7	2.8	3.1	3.3	3.1	3.4	3.1	2.8	2.5	1.9	1.2
15	p0.7c	p0.9c	p1.2c	1.2	p1.5c	p1.8c	2.0	1.1	1.0	1.1	1.2	1.0	0.6	p1.1c	p2.2c	p2.7c	2.8	p3.1c	p3.3c	3.5	3.4	3.1	2.8	2.6	1.9	1.8
16	0.6	0.8	0.6	1.3	1.3	1.3	1.4	1.3	1.2	1.2	1.1	1.0	0.8	1.0	2.3	2.7	3.0	3.2	3.4	3.4	3.4	3.0	[illegible]	2.4	2.0	0.9
17	0.8	1.1	1.2	1.1	0.9	1.1	1.3	1.1	0.9	0.8	0.8	0.7	0.6	1.0	2.2	2.7	3.1	3.2	3.4	3.4	3.4	3.1	2.8	2.5	2.1	0.9
18	0.6	0.7	0.6	1.3	1.4	1.9	1.3	1.1	1.1	1.2	0.8	0.8	0.8	1.1	2.1	2.6	3.2	3.5	3.5	3.5	3.4	3.2	2.8	2.5	1.8	0.8
19	0.6	0.8	1.1	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.6	1.1	2.1	2.7	2.8	3.1	3.5	3.4	3.3	2.9	2.9	2.5	2.0	0.8
20	0.8	0.8	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.8	0.8	1.1	2.9	3.1	3.4	3.4	3.4	3.1	3.0	2.5	2.0	1.0
21	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.3	1.1	1.0	1.0	1.0	1.0	1.1	2.1	2.8	3.0	3.0	3.4	3.5	3.4	3.2	2.8	2.4	1.9	1.2
22	0.8	0.8	0.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.0	0.9	0.8	0.8	2.0	2.6	2.9	3.2	3.4	3.4	3.4	3.0	2.9	2.4	1.9	1.1
23	0.8	1.0	1.2	1.1	1.3	1.4	1.4	1.2	1.3	1.2	1.1	0.8	0.8	1.0	2.1	2.8	3.1	3.3	3.5	3.4	3.3	3.1	2.8	2.4	1.6	0.8
24	0.7	p1.0c	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1.2	1.0	p0.8c	p0.8c	1.0	2.2	2.6	2.9	3.1	3.2	3.3	3.3	3.0	2.5	2.4	2.1	1.1
25	0.8	0.9	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.0	0.8	1.0	2.1	2.6	2.9	3.1	3.3	3.4	3.4	3.0	2.8	2.4	1.6	1.0
26	0.9	1.0	1.1	1.1	1.2	1.3	1.3	1.3	1.2	1.2	1.1	1.0	0.8	1.1	2.2	2.6	p3.0c	3.2	3.4	3.5	3.2	3.2	2.9	2.4	2.0	0.8
27	0.9	1.0	1.0	1.2	1.2	1.2	1.3	1.3	1.2	1.1	1.0	1.0	0.8	1.0	2.1	2.6	3.0	3.1	3.4	3.4	3.4	3.0	2.9	2.5	2.0	0.8
28	0.8	0.8	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.0	1.0	0.9	1.0	2.2	2.6	3.1	3.3	3.4	3.4	3.4	3.1	2.8	2.4	1.8	1.0
29	0.8	0.8	1.1	1.2	1.2	1.2	1.4	1.3	1.3	1.1	1.1	0.9	0.8	0.9	2.2	2.7	2.7	3.2	3.4	3.5	3.2	3.0	2.8	2.4	2.0	1.0
30	1.0	1.1	1.1	1.2	p1.2c	p1.2c	p1.4c	p1.2c	p1.2c	1.2	p1.1c	p1.0c	1.0	1.0	2.2	2.8	2.9	p3.2c	p3.4c	p3.5c	p3.4c	3.3	2.8	p2.4c	p2.0c	1.7
31																										
MEAN*	0.8	0.9	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.8	1.1	2.1	2.6	2.9	3.2	3.4	3.4	3.4	3.1	[illegible]	2.5	1.9	1.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 267

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1943 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND JULY 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	3.0	2.6	2.9	2.5	2.5	2.2f	2.4	4.5	5.2	5.5	5.8	5.8	5.9	6.3	6.8	6.2	...	6.7	6.9	5.3	p5.5f	5.7	p5.7f	p5.7c	4.9
2	5.2	3.9	3.9	3.1	3.0	2.2	2.2	4.5	p5.0c	p5.1c	5.5	6.2	6.0	6.0	6.4	p6.9c	7.4	6.7	6.4	5.4	4.8	5.6	5.8	5.1	5.1
3	4.3	4.2	4.5	4.1	3.2	p2.7f	2.3	5.2	5.8	5.3	5.7	5.9	6.2	6.3	6.4	6.6	7.2	6.0	6.0	5.0	4.9	6.2	4.5	4.2	5.1
4	4.3	4.0	p3.7f	p3.4f	p3.1f	p2.8f	p2.4f	4.9	p6.1c	7.3	6.5	5.8	5.8	6.4	7.1	7.3	7.1	7.4	6.8	5.8	6.0	p5.8f	p5.0f	p4.8f	5.4
5	4.7	4.2	4.3	4.2	3.5	p2.6f	2.6	4.8	6.0	5.8	5.9	5.7	6.2	6.5	6.5	p6.5c	6.4	6.4	5.6	6.5	6.7	4.4	4.2	3.9	5.2
6	4.6	4.6	p4.3f	p3.9f	p3.5f	p3.1f	2.7	5.6	5.5	5.9	5.6	5.1	5.2	5.8	6.0	5.7	5.6	6.1	5.9	p5.8c	p5.6c	p5.5c	4.8	4.6	5.0
7	4.8	...c	...c	...c	...c	...c	...c	...c	...c	6.1	7.6	7.0	6.5	5.4	7.0	6.9	6.4	6.4	6.0	5.7	4.9	4.5	p4.4f	p4.3f	...
8	p4.1f	p4.0f	4.5	4.8	p4.0f	p3.4f	p2.9f	5.2	5.9	5.3	5.4	6.4	6.4	6.2	6.2	6.5	6.4	6.4	6.0	5.8	6.0	6.5	4.5	4.0	5.3
9	4.3	5.1	p4.5f	4.1	3.0	2.2	2.7	4.7	6.2	6.9	6.5	6.3	5.7	6.9	6.2	6.5	6.7	6.4	5.8	6.6	5.9	5.6	5.1	4.7	5.4
10	4.6	p4.5f	p4.5f	4.4	3.8	3.5	2.8	5.0	5.8	6.4	6.6	7.2	6.1	6.8	6.2	6.7	6.7	6.5	6.3	6.0	6.1	5.9	6.1	5.7	5.6
11	5.0	4.3	4.0	4.1	3.2	2.6	p2.5f	5.4	5.9	6.6	5.7	6.0	6.3	6.7	6.8	7.1	6.8	7.0	6.4	5.5	5.7	6.5	5.6	6.0	5.5
12	5.0	4.7	3.9	3.5	2.9	1.8	2.4	5.2	6.0	6.0	5.3	5.4	5.4	5.7	5.9	6.8	7.6	6.8	7.4	6.7	7.0	7.2	6.0	6.2	5.4
13	5.5	4.6	4.2	3.9	p4.1f	4.1	3.9	4.4	4.9	5.5	5.6	5.7	5.7	5.9	6.3	6.2	6.7	6.9	7.0	6.2	6.7	7.2	4.9	4.8	5.5
14	3.8	3.0	2.2	1.7b	1.3b	1.1b	2.6	5.2	6.5	6.8	7.3	6.2	6.3	6.6	6.8	7.8	7.1	7.0	7.4	8.3	6.5	4.9	3.8	3.4	5.2
15	4.2	3.6	3.0	2.2	p1.7f	p1.5f	2.4	4.9	5.9	6.4	6.6	5.8	6.6	6.5	6.8	7.4	7.2	6.9	7.5	7.6	6.0	5.8	4.5	3.5	5.2
16	2.7	2.8	p2.5f	p2.2f	p1.9f	p1.4f	2.4	5.0	5.8	p6.0c	p6.1c	6.2	6.3	6.4	6.9	7.3	7.4	6.8	7.1	6.9	6.9	6.5	p6.5f	p6.6f	5.3
17	p6.6f	6.6	4.3	3.3	2.3	1.4	2.4	4.5	5.0	5.5	p5.7c	p5.9c	6.0	7.2	7.0	6.9	p6.9c	6.8	8.0	p7.1c	6.2	6.7	...c	...c	...
18	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	5.4	5.5	6.2	6.8	6.6	7.0	7.8	7.4	6.9	6.8	6.0	5.6	5.1	...
19	p5.2f	p4.9f	4.5	4.0	p3.9f	3.8	3.5	4.7	5.9	5.9	6.1	6.0	5.5	6.1	5.8	6.9	7.1	7.1	7.2	7.1	7.5	5.4	4.8	4.6	5.6
20	4.8	5.0	4.0	3.6	2.6	2.4	2.7	4.9	5.3	5.9	6.4	5.6	6.2	7.1	7.0	6.9	6.7	7.4	7.1	6.4	p6.2f	p6.0f	5.8	p6.4f	5.5
21	6.1	4.8	4.5	4.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	5.8	5.6	5.7	5.5	p5.9c	p5.7c	p5.6c	p5.5c	4.7	4.7	...
22	5.4	4.4	4.4	p3.4f	p2.5f	1.5	2.3	4.8	5.8	5.7	5.6	p5.6c	p5.7c	p5.8c	p5.8c	6.0	6.3	6.5	6.4	6.4	7.2	6.8	4.4	3.3	5.1
23	3.1	3.4	2.7	p2.0c	p1.9c	p1.8c	p2.8c	p4.8c	5.8	6.5	6.0	5.8	5.8	5.7	6.5	6.4	6.3	6.7	6.5	5.3	6.4	6.3	4.5	5.3	4.9
24	5.6	5.3	3.7	2.9	2.2	2.0	2.4	4.8	6.3	6.2	6.4	6.0	6.2	5.3	5.0	5.6	6.2	6.9	6.1	5.4	5.6	5.1	4.6	3.9	5.0
25	3.3	3.6	3.2	2.2	2.0	1.9	2.3	4.3	5.8	6.2	6.5	5.9	5.6	5.4	5.8	5.9	5.4	5.3	6.6	6.5	6.8	6.7	p4.8	3.7	4.8
26	3.1	2.8	2.4	2.1	1.4	1.3	2.3	p4.5	p5.5	6.4	5.8	5.0	5.2	5.8	5.6	5.4	5.7	6.6	6.3	5.5	5.8	p4.6f	p4.3f	3.3	4.4
27	p4.5f	p4.4f	3.7	3.3	p2.4f	1.9	p1.9	3.2	6.1	6.6	6.5	6.0	6.0	6.3	7.5	6.8	6.7	7.9	7.2	6.8	6.7	5.8	4.9	4.6	5.3
28	4.5	4.5	4.6	p4.5f	p4.5f	3.7	2.1	4.3	5.7	p5.9c	6.1	5.8	6.3	6.3	5.6	5.7	6.4	6.1	5.6	5.3	4.7	5.1	p4.8f	4.6	5.1
29	4.5	4.9	4.4	2.9	3.0	2.7	2.2	4.3	5.3	6.4	6.3	5.1	5.8	6.8	6.8	6.4	6.8	7.0	6.9	6.5	...c	...c	...c	...c	...
30	...c	...c	...c	...c	...c	...c	...c	...c	...c	6.0	5.5	5.2	6.1	6.5	6.4	6.0	6.1	6.1	6.1	5.9	5.5	p5.8f	6.0	5.7	...
31	5.4	6.5f	4.3	4.3	3.9	2.8	2.2	4.3	5.5	5.8	5.9	5.8	6.3	6.5	6.5	7.6	7.1	7.4	7.4	6.9	6.9	7.6	6.6	6.8	5.8
MEAN*	4.6	4.3	3.8	3.4	2.9	2.4	2.5	4.7	5.7	6.1	6.1	5.9	6.0	6.2	6.4	6.6	6.6	6.7	6.6	6.2	6.1	5.9	5.1	4.8	5.2

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 268

JULY 1943 JULY 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	240	250	270	280	270	260	230	330	390	380	340	400	390	330	320	320	280	260	310	300	220	220	210	292
2	220	240	230	240	240	270	260	230	330	q350c	380	400	380	390	360	q330c	300	230	280	290	290	250	270	260	292
3	280	270	270	250	260	260	270	300	310	360	370	380	340	380	360	330	310	240	260	300	300	260	220	240	297
4	240	270	260	240	240	230	270	230	q280c	320	380	400	360	400	350	330	330	260	280	290	290	310	300	240	296
5	230	270	260	250	230	230	280	240	380	370	400	380	400	360	370	340	320	260	260	240	200	220	240	240	290
6	240	290	340	290	280	260	230	230	330	360	400	q410g	q430c	440	420	380	360	250	240	q240c	q250c	q250c	220	240	308
7	260	...c	...c	...c	...c	...c	...c	...c	q280c	360	340	250	410	480	380	300	340	250	270	290	310	280	270	280	...
8	240	240	230	200	210	240	260	250	310	370	370	390	480	400	430	460	300	240	240	280	270	240	230	220	296
9	230	250	240	230	270	330	280	290	320	380	330	440	450	q380g	310	350	310	240	270	280	250	230	260	260	299
10	260	270	230	290	270	250	240	250	290	360	360	340	420	430	340	370	330	270	270	270	250	270	230	220	295
11	270	250	240	220	250	310	270	240	340	340	390	400	380	370	370	360	300	290	280	340	320	250	260	250	304
12	270	280	220	300	230	270	290	300	340	390	q390g	400	460	390	360	330	300	280	240	240	240	260	210	210	300
13	220	250	250	270	240	220	260	220	350	380	410	400	390	350	320	360	330	290	240	250	260	220	210	210	288
14	210	230	240b	240b	260b	270b	260	270	270	320	330	370	360	370	320	300	270	220	240	240	200	220	220	220	269
15	230	220	220	220	230	200	260	230	320	360	350	380	420	380	370	350	310	240	240	230	210	220	230	240	278
16	280	300	340	340	270	260	260	230	330	q360c	q390c	420	420	360	360	390	q330c	270	280	270	250	300	320	280	317
17	250	230	250	280	260	280	300	260	430	390	q390c	q400c	400	430	430	420	q350c	270	270	q280c	280	280	...c	...c	...
18	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	590	490	430	420	360	390	290	280	300	290	280	310	290	...
19	300	280	290	310	310	280	280	270	380	390	430	470	450	400	380	400	360	260	280	270	270	280	270	270	328
20	250	260	260	270	270	320	300	260	370	410	390	530	470	350	420	400	390	260	280	330	330	300	260	250	330
21	240	250	240	250	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	420	450	350	240	280	280	240	250	270	280	...
22	270	300	340	270	230	260	300	260	350	380	390	q410c	q430c	q450c	470	450	380	240	270	270	250	240	240	270	322
23	240	240	250	260	q260c	q270c	270	270	340	380	400	400	510	450	400	350	370	260	280	290	260	230	250	270	312
24	260	260	260	260	270	290	280	260	330	400	490	470	450	500	530	450	380	250	280	300	280	240	240	230	332
25	250	250	260	240	240	220	270	240	340	410	420	430	400	460	490	360	350	230	260	260	240	210	240	230	304
26	230	240	240	240	250	280	260	260	350	350	420	540	490	420	440	400	350	230	270	310	290	300	280	250	320
27	230	230	230	230	250	300	230	230	360	370	360	410	450	370	360	380	350	250	260	240	250	250	260	240	295
28	230	220	220	220	230	250	270	230	320	q400c	480	400	460	360	490	500	320	280	270	270	270	270	240	220	309
29	230	230	230	240	230	240	270	240	360	350	390	430	400	330	380	370	320	240	250	230	...c	...c	...c	...c	...
30	...c	...c	...c	...c	...c	...c	...c	...c	...c	380	430	420	410	380	390	390	370	230	260	290	290	240	250	230	...
31	230	210	250	240	230	250	270	240	360	360	420	400	420	410	360	340	330	240	260	270	290	220	240	230	295
* MEAN	245	252	255	256	251	263	269	250	336	370	392	413	424	400	391	375	336	254	265	276	267	253	250	244	304

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 269

JULY 1943 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — JULY 1943

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.2	4.1	4.2	4.2	4.3	4.2	4.1	4.1	4.3	4.0	...
2	...	...	4.0	p4.1c	4.2	4.3	4.3	4.4	4.2	p4.2c	4.2	...	...
3	...	3.8	4.1	4.3	4.1	4.3	4.3	4.3	4.2	4.0	4.1	...c	...
4	...	...	p4.1c	4.1	4.2	4.4	4.3	4.3	4.1	4.0	4.1	...	...
5	...	...	4.2	4.3	4.3	4.3	4.4	4.3	4.3	4.2	4.1	...	...
6	...	...	4.1	4.2	4.3	4.3	4.3	4.2	4.2	4.1	4.1	...	...
7	...	...	4.1	4.2	4.2	4.5	4.3	4.3	4.2	3.9	4.1	...	...
8	...	...	4.0	4.2	4.2	4.3	4.5	4.3	4.4	4.3	4.1	...	...
9	...	3.7	4.0	4.2	4.2	4.4	4.5	4.4	4.1	4.0	3.9	...	...
10	...	...	4.1	4.2	4.4	4.3	4.5	4.4	4.3	4.3	4.3	...	...
11	...	...	4.2	4.2	4.4	4.5	4.3	4.4	4.4	4.2	4.1	4.0	...
12	...	3.8	4.1	4.5	4.6	4.3	4.3	4.3	4.3	4.2	4.2	3.8	...
13	...	...	4.0	4.3	4.3	4.4	4.3	4.3	4.3	4.4	4.3	4.1	...
14	...	3.9	4.2	4.2	4.3	4.4	4.3	4.4	4.2	4.2	4.4	...	...
15	...	...	4.2	4.2	4.5	4.5	4.3	4.5	4.4	4.3	4.4	...	...
16	...	...	4.4	p4.4c	p4.4c	4.4	4.3	4.3	4.4	4.3	p4.4c	...	...
17	...	...	4.2	4.1	p4.2c	p4.3c	4.3	4.3	4.4	4.3	p4.3c	...	...
18	...	...	p4.1c	p4.2c	p4.3c	4.3	4.3	4.3	4.3	4.2	4.3	...	...
19	...	...	4.1	4.2	4.3	4.2	4.3	4.2	4.2	4.2	4.1	...	...
20	...	...	4.3	4.1	4.3	4.4	4.3	4.2	4.4	4.2	4.2	...	...
21	...	...	...c	...c	...c	...c	...c	...c	4.3	4.3	4.2	...	...
22	...	...	4.2	4.3	4.4	p4.4c	p4.3c	p4.3c	4.3	4.4	4.3	...	...
23	...	...	4.2	4.2	4.3	4.3	4.3	4.2	4.2	4.0	4.0	...	...
24	...	...	4.1	4.1	4.3	4.3	4.3	4.3	4.3	4.3	4.3	...	...
25	...	...	4.0	4.3	4.2	4.2	4.3	4.3	4.2	4.1	4.0	...	...
26	...	...	4.0	4.1	4.2	4.3	4.3	4.3	4.3	4.0	4.0	...	...
27	...	...	4.1	4.2	4.2	4.4	4.4	4.3	4.3	4.1	4.2	...	...
28	...	...	4.3	...c	4.5	4.3	4.3	4.3	4.2	4.1	4.1	...	...
29	...	...	4.0	4.1	4.3	4.3	4.3	4.3	4.4	4.3	4.1	...	...
30	...	...	p4.0c	4.2	4.4	4.3	4.3	4.3	4.3	4.2	4.1	...	...
31	...	...	4.0	4.2	4.3	4.3	4.3	4.3	4.2	4.0	4.1	...	...
MEAN*	...	3.8	4.1	4.2	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.0	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	210	190	200	190	190	190	180	190	230	...
2	...	...	205	200	180	190	190	190	210	p210c	210	...c	...
3	...	...	220	200	190	190	210	200	200	200	190	...	...
4	...	240	p220c	200	210	190	200	180	210	200	220	...	...
5	...	...	230	210	200	210	200	200	200	220	210	...	...
6	...	...	230	200	200	190	200	210	200	200	210	...	...
7	...	...	230	230	200	200	210	220	200	190	190	...	...
8	...	...	230	210	210	200	200	200	200	210	220	...	...
9	...	250	220	220	200	200	190	200	200	200	210	...	...
10	...	...	230	210	210	p200c	210	200	200	210	210	...	...
11	...	...	210	200	180	190	180	200	205	200	200	240	...
12	...	260	240	200	200	190	200	200	200	180	230	240	...
13	...	...	200	200	200	190	190	200	200	210	220	230	...
14	...	240	220	200	190	190	190	190	170	190	230	...	...
15	...	...	210	200	200	190	190	190	200	190	210	...	...
16	...	...	200	p200c	p200c	200	p200c	p200c	p210c	p230c	p230c	...	...
17	...	...	190	200	p200c	p210c	220	210	220	230	p240c	...	...
18	...	...	p230c	p220c	p220c	230	220	230	200	220	250	...	...
19	...	...	230	230	200	230	210	210	200	230	230	...	...
20	...	...	240	230	220	220	210	220	220	220	240	...	...
21	...	...	...c	...c	...c	...c	...c	...c	210	220	220	...	...
22	...	...	230	240	220	p210c	p200c	p200c	210	230	250	...	...
23	...	...	230	220	210	210	220	220	200	220	220	...	...
24	...	...	220	230	230	230	210	200	210	220	230	...	...
25	...	...	230	200	210	220	220	190	210	190	220	...	...
26	...	...	220	210	215	210	210	200	220	230	220	...	...
27	...	...	220	200	190	210	200	210	220	200	220	...	...
28	...	...	220	...c	200	200	210	200	200	200	220	...	...
29	...	...	200	220	210	200	200	190	190	190	230	...	...
30	...	...	...c	200	210	200	200	200	190	210	220	...	...
31	...	...	220	200	200	200	200	200	200	200	210	...	...
MEAN*	...	248	221	210	203	203	203	202	203	207	219	235	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 270

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1943 JULY 1943

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.7	0.8	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.1	0.9	0.8	1.1	2.0	2.6	2.9	3.1	3.1	3.2	3.4	3.2	2.9	2.7	2.2	0.9
2	0.8	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	p1.2c	1.1	0.8	0.8	0.9	2.2	2.7	3.2	3.1	3.4	3.6	3.4	3.4	p3.0c	2.6	2.0	0.8
3	0.8	1.0	0.8	0.8	1.1	1.2	1.1	1.0	1.2	1.2	1.2	0.8	0.8	0.8	2.0	2.6	2.8	3.0	3.2	3.4	3.1	2.9	2.8	2.4	1.9	0.8
4	0.6	1.0	p1.1c	1.1	1.2	1.2	1.2	1.3	1.2	1.1	1.0	0.8	0.8	0.9	2.1	p2.6c	3.0	3.4	3.3	3.5	3.5	3.4	2.6	2.4	2.1	1.2
5	0.8	1.0	1.2	1.2	1.4	1.4	1.4	1.4	1.3	1.2	1.2	1.1	0.8	0.9	2.1	2.6	2.9	3.2	3.5	3.6	3.5	3.0	3.7	2.4	1.8	0.9
6	1.1	1.1	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.7	0.8	1.1	2.2	2.4	2.5	2.8	3.0	3.4	3.5	2.9	2.8	2.5	1.7	1.1
7	p1.0c	p1.0c	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.0	0.8	0.8	p1.0c	p2.1c	2.6	2.9	3.1	3.6	3.4	3.4	3.2	2.9	2.6	1.9	0.9
8	0.8	1.0	1.2	1.2	1.4	1.3	1.2	1.2	1.1	1.0	1.0	0.8	0.8	0.8	2.0	2.6	2.9	3.2	3.1	3.5	3.4	3.3	2.9	2.6	2.0	1.6
9	1.0	1.2	1.1	1.2	1.1	1.2	1.3	1.1	1.1	1.2	1.0	0.8	0.7	1.0	2.0	2.7	2.9	3.1	3.4	3.3	3.2	3.1	2.9	2.6	1.9	0.9
10	0.8	1.1	1.2	1.1	1.2	1.1	1.1	1.1	1.1	1.2	1.2	1.2	0.6	1.0	2.1	2.6	2.6	2.6	3.5	3.2	3.7	3.2	2.5	2.4	1.5	1.2
11	0.7	0.8	1.0	1.1	1.2	1.1	1.2	1.3	1.2	1.2	1.2	1.0	0.8	1.0	1.9	2.4	2.8	3.0	3.5	3.5	3.5	3.4	2.9	2.6	1.9	1.0
12	0.8	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.2	1.2	1.1	0.8	1.0	2.0	2.5	2.6	3.2	3.4	3.6	3.4	3.2	2.9	2.8	1.8	0.9
13	0.8	0.8	1.1	0.8	1.3	1.3	1.2	1.3	1.2	1.2	1.0	1.1	0.8	1.1	1.4	2.4	2.7	3.0	3.7	3.5	3.4	3.2	2.9	2.4	2.0	0.8
14	0.8	0.8	1.1	1.2	1.2	1.2	1.1	1.0	1.3	1.2	1.2	1.1	0.8	1.0	2.2	2.6	3.1	3.3	3.3	3.5	3.5	3.0	3.0	2.7	1.9	0.8
15	0.8	0.8	0.9	1.2	1.3	1.2	1.3	1.4	1.3	1.2	1.1	1.1	0.8	1.0	2.0	2.4	3.1	3.5	3.5	3.6	3.2	3.2	2.9	2.5	2.1	1.3
16	0.8	1.0	1.0	p1.0c	p1.2c	1.2	1.2	1.2	1.2	1.2	1.1	1.1	0.8	1.0	2.0	2.6	p2.9c	p3.1c	3.4	p3.6c	p3.9c	p3.6c	p3.4c	2.5	1.9	0.9
17	0.8	0.9	1.0	1.1	p1.2c	p1.2c	1.2	1.2	1.2	1.2	p1.1c	1.1	0.9	1.0	2.0	2.4	3.0	p3.2c	p3.3c	3.5	3.6	3.2	2.9	p2.5c	2.1	1.2
18	...c	...c	...c	...c	...c	1.3	1.3	1.4	1.3	1.2	1.1	1.1	0.8	...c	...c	...c	...c	...c	3.4	3.5	3.6	3.1	2.9	2.4	2.0	1.2
19	0.8	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.2	1.2	1.1	0.8	0.9	1.0	2.0	2.4	2.3	3.0	3.4	3.5	3.5	3.1	2.9	2.4	2.0	1.2
20	0.8	1.0	1.0	1.2	1.2	1.3	1.3	1.4	1.3	1.2	1.2	1.0	0.9	0.8	2.0	2.7	3.0	3.5	3.6	3.6	3.6	3.5	3.0	2.5	2.2	1.1
21	...c	...c	...c	...c	...c	...c	...c	...c	1.2	1.3	1.2	1.1	0.8	...c	...c	...c	...c	...c	...c	...c	...c	3.0	2.9	2.4	1.9	0.8
22	0.9	1.0	1.1	1.2	1.2	p1.2c	p1.2c	p1.3c	1.3	1.3	1.1	0.8	0.8	0.9	2.2	2.8	3.2	3.4	p3.5c	p3.5c	p3.4c	3.3	3.0	2.2	2.0	1.3
23	0.7	0.8	1.2	1.3	1.3	1.2	1.3	1.3	1.3	1.2	1.1	1.1	0.8	0.7	2.0	2.7	3.0	3.2	3.5	3.5	3.4	3.0	2.7	2.4	2.0	0.8
24	0.8	0.8	1.1	1.6	1.2	1.3	1.4	1.2	1.2	1.1	1.1	1.1	0.9	0.9	2.0	2.5	3.0	3.1	3.3	3.5	3.5	3.2	2.8	2.5	2.1	0.9
25	0.8	0.8	1.0	1.1	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.1	0.8	1.0	2.2	p2.4	2.8	3.1	3.5	3.5	3.7	3.5	3.0	2.6	2.0	1.2
26	0.6	0.6	1.1	1.2	1.3	1.4	1.2	1.4	1.4	1.6	1.0	1.1	0.9	1.0	2.1	2.6	2.8	3.1	3.3	3.6	3.6	3.5	3.1	2.4	1.8	0.9
27	0.8	1.2	0.9	1.2	1.2	1.1	1.2	1.1	1.2	1.0	1.1	0.8	0.9	0.8	1.5	2.7	2.9	3.0	3.1	3.4	3.5	3.1	2.9	2.5	1.9	0.9
28	0.7	0.7	1.0	p1.0c	1.1	1.2	1.1	1.3	1.2	1.2	1.1	0.8	0.8	1.0	2.2	2.7	p3.0c	3.4	3.5	3.5	3.6	3.2	2.8	2.6	2.1	0.8
29	0.9	0.7	0.8	1.0	1.1	1.1	1.2	1.3	1.1	1.2	1.1	1.0	1.0	0.9	2.1	2.6	2.7	3.4	3.1	3.5	3.5	3.4	3.0	2.7	2.1	1.7
30	p0.9c	p1.0c	p1.2c	1.3	1.1	1.8	1.1	1.2	1.2	1.1	1.2	1.1	0.8	p1.0c	p1.7c	p2.6c	2.8	3.2	3.2	3.2	3.4	3.1	2.7	2.5	2.0	0.8
31	0.6	0.6	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.2	1.1	1.1	0.8	1.1	1.4	2.6	2.8	3.1	3.1	3.5	3.2	3.3	2.8	2.5	2.0	0.8
* MEAN	0.8	0.9	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.0	0.8	1.0	2.0	2.6	2.9	3.2	3.4	3.5	3.5	3.2	2.9	2.5	2.0	1.0

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 271

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1943 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND AUGUST 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.4	6.1	4.6	3.7	3.2	3.0	2.2	4.0	5.7	5.9	5.5	5.7	6.1	6.5	6.9	6.8	7.2	7.8	7.3	6.4	6.1	6.9	7.0	5.3	5.7
2	5.3	3.8	2.7	2.4	2.1	1.4	2.4	4.5	5.4	5.7	5.8	5.4	5.5	6.3	6.0	5.7	6.5	7.1	7.0	6.1	6.1	p6.2f	6.4	6.1	5.1
3	5.4	5.5	p5.6f	5.8	4.4	p3.5f	2.6	5.2	6.3	5.8	5.6	5.4	5.9	5.4	5.2	5.9	6.5	7.2	6.4	6.5	6.8	6.1	4.7	5.0	5.5
4	5.5	4.6	3.7	p3.5f	3.3	1.3b	2.3b	5.2	6.2	7.6	6.6	6.4	6.5	5.9	5.9	7.0	8.2	7.4	7.3	6.7	6.4	6.6	7.1	p6.4f	5.8
5	p5.7f	p4.9f	4.2f	4.5f	4.5f	p3.4f	2.4	4.8	5.7	5.4	...c	...c	...c	...c	...c	...c	...c	...c	6.2	5.7	5.8	6.1	p5.3c	4.5	...
6	4.4	4.4	4.1	3.4	2.6c	2.4	3.0	5.2	7.0	p7.2c	p7.4c	7.6	6.4	6.5	6.1	6.5	7.2	7.4	7.0	6.3	6.5	6.6	5.6	4.5	5.6
7	3.9	3.4	3.1	3.3	3.0	p2.2b	2.8	4.6	6.1	6.7	7.1	6.7	5.5	5.9	6.8	6.4	7.1	7.2	7.1	6.8	6.6f	p6.2f	p5.9f	5.5	5.4
8	p5.3f	p5.1f	p4.9f	p4.6f	4.4	2.6	2.9	5.1	5.9	6.3	6.0	5.6	6.5	6.0	6.6	6.3	6.6	6.8	7.1	7.0c	p6.9f	p6.8f	6.7	6.8	5.8
9	6.7	5.5	p5.0f	p4.5f	p4.3f	p2.6f	2.5	5.0	6.0	6.9	7.3	7.2	8.4	7.8	7.3	7.3	6.8	6.1	6.8	6.7	6.5	6.3	5.5	5.1	6.0
10	4.6	5.1	4.2	3.8	3.5	2.9	2.4	4.7c	5.4	5.7	5.8	5.9	5.7	6.2	6.2	6.0	6.0	5.8	6.1	6.0	6.1	5.7	4.5	4.2	5.1
11	3.8	4.2f	4.1	3.6	2.9	2.7	2.5	5.0	5.8	6.4	6.0	6.3	5.8	p6.2c	6.5	6.2	p6.0c	p6.1c	p6.3c	p6.2c	6.1	...c	...c	...c	...
12	...c	...c	...c	...c	...c	2.5	1.9	p4.7c	p5.6c	6.4	p6.9	6.5	6.9	6.2	p6.0	6.0	6.4	6.4	6.4	p6.4c	6.4	p6.5c	6.0	4.6	...
13	4.9	4.3	p4.1c	p3.9c	p3.7c	...c	...c	...c	...c	...c	...c	5.3c	5.9c	6.5c	6.2c	p6.1c	6.0	6.0	p5.8c	5.6c	5.7c	p5.8c	5.9	5.7	...
14	5.2	5.1	p5.0f	4.8f	p4.2c	p3.6c	p3.0c	5.9c	6.4c	p6.7c	p6.9c	7.2	7.0	7.4	7.0	7.5	8.0	8.8	9.5	8.0	7.2	7.1	6.7	5.8	6.4
15	4.8	5.0	4.1	3.7	p3.2f	p2.7f	2.3	5.9	7.5	8.0	7.7	7.6	7.9	7.7	8.2	7.9	8.1	8.3	8.4	7.9	6.9	6.9	6.3	6.1f	6.4
16	p6.3f	p6.5f	6.7	4.7	4.4f	4.5f	p5.0f	5.8	7.0	8.6	8.4	7.2	6.5	6.7	7.0	7.5	7.9	8.4	7.8	7.7	7.6	7.3f	6.7f	6.7f	6.8
17	p6.3f	p5.8f	5.4f	4.5f	4.2f	p2.5f	2.7	4.8	p5.5c	6.2	6.2	p6.2	6.5	6.7	7.1	6.9	7.1	8.1	8.4	8.7	7.9	7.0	6.6	5.5	6.1
18	5.8	4.8f	4.6f	4.3	3.3	p2.7b	3.2	6.1	7.5	7.8	7.0	6.3	6.1	6.2	6.6	6.9	7.2	7.4	7.8	7.2	6.3	5.9f	6.1	6.1	6.0
19	6.5	6.4	5.7	5.1	4.7	3.5	3.8	5.8	7.1	8.2	8.1	8.3	7.4	7.3	6.7	6.8	7.5	7.6	8.4	7.7	p7.5f	p7.3f	7.0f	5.3	6.7
20	5.6	5.0	4.2	3.8	p3.4f	p3.0f	3.1f	5.8	7.2	7.3	7.6	7.6	6.9	6.6	6.8	7.1	7.1	8.1	8.1	7.0	6.4	7.0	7.6	7.6	6.2
21	6.2	5.8	5.0	5.1	4.5	3.8	4.7	6.5	8.3	8.4	7.0	7.0	6.7	6.5	7.0	7.2	7.2	6.8	6.8	6.5	5.6	5.9	6.6	6.8	6.3
22	6.1	6.9	6.5	6.1	5.7	4.8	4.4	6.8	7.2	8.7	p7.6c	p6.7c	7.3	6.7	7.6	7.7	7.8	7.6	7.4	7.1	6.5	6.9	7.4	7.4	6.9
23	6.2	5.0	4.5	3.3	2.5	2.2	3.4	6.3	7.6	7.8	7.5	7.2	7.5	7.2	7.3	7.7	7.5	7.6	7.9	8.0	8.2	8.5	7.6	5.7	6.4
24	4.7	3.3	2.3	p2.2f	p2.1f	2.0f	3.2	6.2	8.0	8.4	7.4	6.5	6.5	6.7	6.5	7.5	8.3	8.3	7.8	7.8	8.6	8.4	6.8	6.2	6.1
25	5.9	5.6	p5.3	5.0	4.5	4.6	3.0	5.7	7.4	8.2	7.9	7.3	7.0	6.7	7.0	7.5	8.0	8.3	8.3	8.0	7.7	7.1	6.6	5.7	6.6
26	5.4	5.4	4.5	3.9	3.3	2.9f	3.1	5.7	6.8	6.8	7.2	6.7	7.1	7.1	7.5	7.9	8.5	8.5	8.7	7.8	7.5	8.1	7.7	5.6	6.4
27	5.0	4.9	4.4	p3.8c	3.2	2.9	3.2	6.1	6.6	6.7	p6.9c	7.0	6.8	7.3	7.5	7.4	7.9	7.7	7.7	7.1	6.4	6.9	6.8	6.4	6.1
28	6.8	6.5	6.3	5.0	4.3	3.4	p3.4c	6.4	7.3	7.0	8.5	8.3	7.3	7.1	p7.5c	p7.4c	7.3	7.2	7.8	7.8	7.5	7.0	p6.7c	7.1	6.7
29	7.2	7.0	6.6	6.5	5.8c	5.0	3.3	6.6	7.2	7.4	7.3	7.4	7.6	7.8	p7.5c	7.3	7.6	8.3	8.7	7.9	7.8	7.4	7.2	p7.4f	7.1
30	p7.7f	7.9f	5.8	4.4f	p3.2f	2.1f	3.9	6.8	7.4	7.3	6.6	7.4	8.8	8.2	7.9	8.1	8.5	8.7	9.0	8.6	8.6	p8.7f	p8.5f	p8.3f	7.2
31	p8.1f	p8.0f	6.8f	p6.4f	p6.0f	5.5	3.7	6.8	6.7	7.0	6.8	6.6	6.9	5.9	p6.6c	7.3	7.0	7.1	8.6	7.7	7.1	6.0f	p6.1f	p6.3f	6.7
* MEAN	5.8	5.4	4.8	4.3	3.8	3.1	3.1	5.6	6.7	7.1	7.0	6.8	6.8	6.7	6.3	7.0	7.3	7.5	7.6	7.1	6.9	6.8	6.5	6.0	6.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 272

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1943 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — AUGUST 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	190	210	220	230	260	320	280	230	340	340	390	450	460	360	380	330	330	240	250	280	290	270	250	260	298
2	250	220	230	270	250	260	250	220	410	380	400	440	410	390	380	420	340	230	280	310	280	240	270	270	308
3	260	250	250	250	240	270	260	230	320	370	470	430	440	490	480	440	q370a	300	270	270	270	250	240	270	320
4	260	220	230	230	230	240	260	240	300	320	340	420	390	430	360	390	280	290	270	270	280	270	290	260	295
5	240	260	300	290	290	310	270	230	350	400	...c	...c	...c	...c	...c	...c	...c	...c	q280c	q280c	290	280	q240c	230	...
6	230	240	240	220	230	260	250	240	320	q320c	q330c	340	400	410	410	370	300	250	270	270	270	240	190	220	284
7	230	240	240	230	200	q220b	240	240	270	280	340	410	430	410	380	360	320	240	270	300	320	260	220	250	288
8	240	240	240	250	240	220	240	230	320	330	420	380	440	400	380	360	380	250	290	320	310	280	270	240	303
9	240	290	330	300	350	250	280	240	350	330	360	400	370	360	450	360	370	230	270	280	280	240	220	230	304
10	230	230	240	250	250	280	280	230	350	400	430	450	440	420	370	400	350	230	260	270	230	230	230	240	304
11	240	220	220	230	230	250	250	230	330	350	370	390	420	q400c	380	350	q330c	q310c	q260c	q250c	230	...c	...c	...c	...
12	...c	...c	...c	...c	...c	230	270	q290c	q310c	330	q350c	370	360	380	q400	410	330	240	240	240	230	220	220	230	...
13	220	230	270	250	250	250	250	q280c	q320c	q350c	q360c	370	q370c	q360c	q370c	380	310	240	q240c	270	290	q280c	260	230	292
14	230	250	260	260	240	270	q290c	230	q320c	370	350	350	360	330	320	340	290	250	240	240	220	220	220	200	277
15	230	230	240	270	260	270	250	280	280	300	340	350	360	350	330	320	340	230	240	230	230	260	250	240	278
16	230	230	220	230	230	230	240	230	300	300	290	350	420	360	360	320	300	250	240	280	260	240	250	200	273
17	200	230	230	260	280	280	250	240	q280c	320	380	q380c	400	340	350	310	310	240	250	240	240	200	230	250	279
18	270	280	240	210	230	q230b	240	260	260	320	360	390	430	360	350	340	290	280	270	320	270	250	230	230	288
19	230	230	230	230	230	230	250	260	280	310	310	320	400	320	390	330	310	240	260	350	310	250	210	230	280
20	220	240	290	330	350	320	270	270	300	350	310	350	350	370	340	340	350	240	260	280	270	260	220	220	296
21	230	240	260	260	240	240	250	270	290	320	330	330	370	360	360	350	330	240	260	320	340a	270	250	220	289
22	250	240	250	250	230	230	250	250	300	320	q330	360	330	420	370	310	330	240	260	280	260	230	210	210	280
23	220	220	220	220	230	250	250	250	290	330	350	340	340	340	380	360	290	230	250	290	230	230	210	220	273
24	220	220	270	270	290f	380	260	270	300	310	360	400	390	380	350	350	300	270	260	250	230	240	240	230	293
25	230	230	q230	240	230	260	260	270	300	280	330	360	380	380	340	330	300	270b	250b	270b	230	230	230	220	277
26	220	200	220	230	290	350	270	290	320	320	380	320	360	350	330	310	300	q280c	250	280	240	230	300	220	286
27	220	220	230	250	240	240	240	280	310	350	q340c	350	370	360	320	300	310	280	260	270	240	220	210	220	276
28	210	220	210	220	220	230	240	q280c	320	290	300	320	370	340	q350c	q320c	300	q280c	250	250	230	230	240	240	269
29	230	230	220	240	270	300	260	230	320	350	340	350	330	330	q340c	350	290	270	270	250	270	280	250	300	286
30	240	250	290	360	310	250	260	240	280	330	370	340	330	300	350	320	290	230	250	310	300	320	280	250	294
31	260	250	300	320	280	320	280	240	300	320	350	370	330	410	q380c	350	310	240	260	290	310	330	320	280	311
MEAN*	232	236	247	255	256	266	258	251	311	325	356	373	387	374	368	351	318	254	260	278	266	255	242	237	290

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 273

AUGUST 1943 — AUGUST 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.1	4.1	4.3	4.3	4.3	4.3	4.5	4.2	4.3	...	...
2	...	...	4.1	4.1	4.2	4.3	4.3	4.3	4.4	4.4	4.2	...	...
3	...	...	4.3	4.2	4.2	4.3	4.3	4.4	4.2	4.1	p4.1a	...	...
4	...	...	4.2	4.3	4.2	4.4	4.3	4.3	4.2	4.2	4.3	...	...
5	...	...	4.0	4.2	...c	...c	...c	...c	...c	...c	...c	...	...
6	...	...	4.3	p4.4c	p4.4c	4.4	4.6	4.5	4.4	4.4	p4.3a	...	...
7	...	...	4.3	4.1	4.3	4.4	4.4	4.3	4.2	4.3	4.3	...	...
8	...	...	4.3	4.2	4.3	4.4	4.3	4.4	4.4	4.5	4.4	...	...
9	...	...	4.2	4.3	4.4	4.5	4.3	4.3	4.2	4.2	4.1	...	...
10	...	...	4.2	4.3	4.3	4.3	4.4	4.3	4.2	4.3	4.3	...	...
11	...	...	4.3	4.3	4.4	4.4	p4.4c	p4.3c	4.3	4.2	p4.1c	...	...
12	...	...	p4.1c	4.2	p4.3c	4.4	4.4	4.5	p4.5	4.5	4.2	...	...
13	...	...	p4.1c	p4.1c	p4.3c	p4.5c	p4.4c	p4.3c	p4.1c	p4.1c	4.1	...	...
14	...	...	p4.2c	p4.4c	4.4	4.5	4.4	4.4	4.4	4.4	4.0	...	...
15	...	4.0	4.2	4.5	4.3	4.6	4.5	4.5	4.5	4.5	4.3	...	...
16	...	...	4.2	4.3	4.3	4.6	4.7	4.5	4.5	4.5	4.2	4.0	...
17	...	...	p4.2c	4.3	4.5	4.6	4.6	4.4	4.5	4.3	4.2	...	...
18	...	3.9	4.2	4.3	4.6	4.5	4.5	4.6	4.3	4.5	4.1	4.0	...
19	...	3.8	4.3	4.6	4.5	4.5	4.8	4.4	4.6	4.5	4.2	...	...
20	...	3.8	4.5	4.5	4.5	4.6	4.7	4.6	4.6	4.5	4.5	...	...
21	...	4.1	4.5	4.6	4.5	4.6	4.7	4.7	4.5	4.6	4.4	...	...
22	...	3.8	4.5	4.6	p4.7	4.6	4.6	4.7	4.3	4.3	4.5	...	...
23	...	3.8	4.4	4.6	4.5	4.5	4.6	4.5	4.5	4.5	4.3	...	...
24	...	3.8	4.5	4.5	4.4	4.5	4.5	4.5	4.6	4.4	4.1	4.0	...
25	...	4.0	4.3	4.2	4.4	4.5	4.5	4.5	4.4	4.4	4.2	4.1	...
26	...	4.0	4.2	4.6	4.5	4.6	4.6	4.6	4.5	4.4	4.3	p4.0c	...
27	...	4.2	4.5	4.6	p4.5c	4.6	4.6	4.6	4.5	4.4	4.4	4.0	...
28	...	...c	4.6	4.5	4.6	4.7	4.8	4.7	4.6	p4.5c	4.5	p4.1c	...
29	...	...	4.6	4.7	4.7	4.8	p4.8c	4.7	p4.6c	4.6	4.3	4.0	...
30	...	4.2	4.2	4.6	4.6	4.5	4.7	4.4	4.5	4.4	4.2	...	...
31	...	...	4.3	4.3	4.5	4.6	4.7	4.7	p4.4c	4.1	4.2	...	...
MEAN*	...	4.0	4.3	4.4	4.4	4.5	4.5	4.5	4.4	4.4	4.2	4.0	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	210	200	200	200	200	190	200	210	220	...	...
2	...	...	230	210	210	200	190	200	200	230	230	...	...
3	...	...	220	210	200	190	200	200	200	210	p220a	...	...
4	...	...	230	210	210	200	190	200	190	200	220a	...	...
5	...	...	220	200	...c	...c	...c	...c	...c	...c	...c	...	...
6	...	...	210	p210c	p210c	210	210	200	200	200	p200a	...	...
7	...	...	220	210	190	200	200	190	200	200	200	...	...
8	...	...	220	210	200	200	200	200	200	200	200	...	...
9	...	...	230	210	200	210	200	210	200	200	210	...	...
10	...	...	210	200	200	200	190	200	200	200	200	...	...
11	...	...	210	200	200	200	p200c	p200c	200	190	p210c	...	...
12	...	...	p220c	200	p200c	200	190	190	p200	200	200	...	...
13	...	...	p210c	p200c	p200c	p190c	p190c	p190c	p200c	210	215	...	...
14	...	...	210	200	200	210	200	200	190	180	200	...	...
15	...	220	210	200	190	200	190	200	180	180	200	...	...
16	...	...	210	210	200	200	190	180	190	180	210	230	...
17	...	...	p220c	210	200	190	200	200	200	190	190	...	...
18	...	230	210	205	210	190	190	190	190	200	220	230	...
19	...	240	220	210	200	200	200	190	200	190	200	...	...
20	...	240	220	200	210	200	200	200	200	200	210	...	...
21	...	230	220	210	200	190	190	190	190	190	190	...	...
22	...	230	220	210	p220c	200	200	200	200	200	200	...	...
23	...	230	220	200	200	200	190	205	200	200	190	...	...
24	...	230	210	200	200	200	200	190	190	190	210	240	...
25	...	230	215	210	210	200	200	200	190	200	210	230	...
26	...	240	220	200	200	200	210	p200c	p200c	200	200	230	...
27	...	230	220	200	220	200	200	p180c	p200c	200	200	240	...
28	...	220	200	p200c	p200c	p205c	p205c	p210c	p205c	p205c	200	...	...
29	...	...	210	p200c	p200c	p200c	p190c	p200c	p190c	190	190	240	...
30	...	230	230	220	220	220	210	200	200	200	220	...	...
31	...	...	220	200	210	200	200	190	p200c	210	220	...	...
MEAN*	...	231	217	205	204	200	198	196	197	198	206	234	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 274

AUGUST 1943 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — AUGUST 1943

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.6	0.7	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	0.6
2	0.8	1.1	1.1	1.2	1.3	1.3	1.1	1.3	1.1	1.1	1.1	1.1	0.8
3	1.0	0.8	1.1	1.1	1.2	1.3	1.3	1.3	1.1	1.2	1.1	1.1	1.1
4	0.8	0.8	1.1	1.2	1.3	1.3	1.7	1.3	1.2	1.1	1.2	1.1	0.8
5	0.6	1.1	1.1	1.2	p1.3c	p1.3c	p1.9c	p1.3c	p1.2c	p1.2c	p1.2c	p1.1c	1.0
6	0.7	0.8	1.2	p1.2c	p1.3c	1.3	2.1	1.3	1.4	1.3	1.1	1.1	1.0
7	1.1	1.1	1.2	1.1	1.2	1.2	1.3	1.7	1.3	1.1	1.2	1.2	0.9
8	1.1	1.1	1.2	1.0	1.2	1.3	1.1	1.3	1.1	1.2	1.1	1.1	0.7
9	0.9	0.6	1.1	1.2	1.2	1.1	1.1	1.4	1.4	1.2	1.1	1.1	0.6
10	0.6	0.9	0.8	1.1	1.2	1.3	1.3	1.3	1.2	1.2	1.2	1.1	0.9
11	0.8	1.1	1.1	1.2	1.3	1.1	p1.2c	p1.2c	1.2	1.3	p1.2c	p1.0c	p0.9c
12	0.6	p0.8c	p1.0c	1.1	p1.2c	1.2	1.3	1.3	p1.4c	1.3	1.1	0.9	1.0
13	p0.8c	p1.0c	p1.0c	p1.0c	p1.2c	1.3	1.9	1.5	1.2	p1.2c	1.2	0.8	0.6
14	p0.9c	1.2	1.1	1.4	1.4	1.7	1.8	1.8	1.3	1.2	1.2	1.1	0.6
15	0.6	0.7	1.1	1.2	1.3	1.3	1.3	1.2	1.3	1.2	1.2	1.2	0.7
16	1.0	1.0	1.1	1.3	1.3	1.3	1.4	1.3	1.4	1.2	1.2	1.1	0.7
17	0.6	p1.0c	p1.2c	1.2	1.2	1.3	1.4	1.4	1.8	1.4	1.1	1.2	0.7
18	1.1	1.2	1.3	1.2	1.3	1.3	1.4	1.4	1.3	1.2	1.2	1.2	0.6
19	1.0	1.2	1.2	1.2	1.3	1.4	1.4	1.4	1.3	1.2	1.2	1.2	0.9
20	0.6	0.6	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.3	1.2	1.2	0.6
21	0.6	0.7	1.2	1.2	1.3	1.2	1.3	1.4	1.4	1.2	p1.1	1.0	1.1
22	0.6	1.1	1.2	1.4	p1.5c	p1.6c	1.7	1.7	1.3	1.2	p1.2	p1.0c	0.7
23	0.6	0.9	1.2	1.2	1.2	1.4	1.7	1.8	1.4	1.3	1.2	1.0	0.6
24	0.6	1.0	1.2	1.2	1.3	1.4	1.3	1.4	1.3	1.2	1.2	1.0	0.6
25	0.6	1.0	1.2	1.2	1.2	1.3	1.2	1.3	1.2	1.2	1.2	1.0	0.6
26	0.6	0.7	1.2	1.2	1.4	1.4	1.5	1.4	1.5	1.4	1.2	1.2	0.9
27	1.2	1.2	1.3	1.4	p1.4	p2.1c	p2.1c	1.5	p1.5c	1.4	1.4	1.2	0.6
28	1.2	0.7	1.1	p1.4c	p1.5c	p1.1c	p1.2c	p1.3c	p1.4c	p1.3c	1.2	1.2	p0.6c
29	0.8	0.8	1.0	p1.4c	p1.1c	p1.1c	p1.2c	p1.3c	p1.3c	1.2	1.0	0.8	0.6
30	0.6	0.6	1.2	1.0	1.2	1.7	1.8	1.3	1.2	1.2	1.1	1.0	0.6
31	0.6	0.7	1.2	1.2	1.3	1.3	1.3	1.8	p1.3c	1.2	1.1	1.0	0.8
MEAN*	0.8	0.9	1.1	1.2	1.3	1.3	1.4	1.4	1.3	1.2	1.2	1.1	0.8

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.5	2.6	2.7	3.3	3.2	3.4	3.3	3.5	2.9	2.5	1.3	1.1
2	1.0	2.3	2.7	2.7	3.1	3.3	3.1	3.6	3.1	2.9	2.4	2.1	0.8
3	1.0	1.9	2.6	2.9	3.2	3.5	3.2	3.3	3.2	2.7	2.6a	2.5	1.9
4	0.9	2.1	2.8	3.0	3.2	3.5	3.4	3.5	3.1	2.9	2.6	2.2	1.1
5	1.0	2.0	2.5	2.8	p2.9c	p3.0c	p3.5c	p3.6c	p3.2c	p2.9c	p2.6c	p2.2c	1.0
6	0.9	2.1	2.6	p2.6c	p2.6c	2.6	3.6	3.6	3.2	2.9	2.6	2.2	1.2
7	1.2	2.3	2.7	3.0	3.1	3.5	p3.8c	3.4	3.2	3.0	2.6	2.1	1.1
8	1.1	2.1	2.6	3.0	3.2	3.6	3.5	3.5	3.2	3.0	2.5	2.0	p1.2c
9	1.0	2.2	2.6	3.1	3.5	3.5	3.4	3.1	3.1	3.0	2.6	2.2	1.1
10	1.0	2.2	2.6	2.8	3.2	3.5	3.4	3.0	3.3	2.9	2.6	2.2	1.0
11	1.0	2.1	2.7	3.0	3.1	p3.4c	p3.2c	p3.0c	p2.9c	p2.9c	p2.8c	p2.2c	p1.2c
12	0.8	p2.2c	p2.6c	2.9	p3.2c	3.4	3.7	3.4	p3.4c	3.5	3.0	2.2	1.4
13	p1.0c	p2.2c	p2.7c	p3.1c	p3.2c	p3.4c	p3.4c	p3.4c	p3.4c	p3.2c	2.5	2.1	p1.2c
14	p1.1c	2.3	2.6	3.2	3.1	3.4	3.1	3.4	3.4	2.9	2.7	1.9	1.1
15	1.2	1.9	2.4	3.1	3.2	3.4	3.3	3.4	3.2	2.8	2.6	2.1	1.0
16	1.3	2.2	2.7	3.1	3.5	3.4	3.4	3.6	3.4	2.8	2.8	2.0	0.7
17	1.4	p1.9c	p2.4c	p2.9	3.1	3.0	3.5	3.3	3.3	3.0	2.6	2.2	1.1
18	1.2	2.2	2.7	3.0	3.3	3.3	3.4	3.4	3.4	3.0	2.6	2.1	0.9
19	1.4	2.2	2.8	3.2	3.3	3.5	3.3	3.4	3.3	3.0	2.7	2.1	1.8
20	1.2	2.1	2.8	2.9	3.4	3.4	3.4	3.4	2.9	2.9	2.6	2.1	0.8
21	1.2	2.2	2.6	3.1	3.4	3.4	3.5	3.4	3.2	3.0	2.6	2.1	1.2
22	1.2	2.3	2.8	3.1	p3.3c	3.5	3.5	3.5	3.4	3.0	2.6	2.2	1.1
23	1.2	2.2	2.8	3.1	3.4	3.5	3.5	3.7	3.4	3.0	2.6	2.1	1.2
24	1.2	2.2	2.8	3.1	3.4	3.4	3.4	3.5	3.4	3.1	2.7	2.2	1.2
25	1.3	2.3	2.8	3.0	3.4	3.6	3.4	3.5	3.4	3.0	2.7	2.2	p1.2b
26	1.3	2.3	3.0	3.5	3.6	3.5	p3.5c	p3.6c	p3.2c	p2.8c	3.1	2.3	0.9
27	1.4	2.4	2.9	3.2	3.6	p3.2c	3.9	p3.6c	p3.5c	3.2	2.8	2.2	1.2
28	1.2	2.3	2.8	p3.0c	p3.2c	p3.3c	p3.5c	3.2	p3.1c	p3.0c	2.9	2.4	1.2
29	1.2	2.5	2.9	p3.0c	p3.1c	p3.4c	p3.4c	p3.2c	p3.2c	2.8	2.6	2.1	p1.1c
30	1.4	2.2	2.7	3.0	3.1	3.4	3.2	3.4	3.3	2.9	2.4	2.0	1.0
31	1.2	2.1	2.5	2.8	3.3	[illegible]	3.4	3.4	p3.2c	3.1	2.7	2.0	1.0
MEAN*	1.2	2.2	2.7	3.0	3.2	[illegible]4	3.4	3.4	3.3	3.0	2.7	2.1	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 275

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1943 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — SEPTEMBER 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p6.4f	6.5f	4.8f	4.3f	p4.2f	p4.0f	3.9f	6.1	6.8	7.3	7.3	6.6	7.0	7.4	7.8	8.8	9.8	9.6	9.5	8.5	7.9	9.3	9.4f	9.4f	7.2
2	7.5f	6.5f	5.0	5.4	4.9	3.0	3.8	6.4	7.0	8.1	7.9	8.5	6.4	8.1	8.2	8.0	9.2	8.8	8.7	8.1	8.5	9.3	9.0	7.0	7.3
3	5.6	5.3	6.3	6.0	5.2f	5.0f	3.9	6.7	8.1	8.4	7.6	7.8	7.6	7.3	7.0	7.1	7.3	7.5	7.3	6.0	6.8	7.8	6.6	6.3	6.7
4	6.7	7.0	6.0	5.3	4.9	4.3f	3.8	6.6	8.2	7.4	7.8	7.5	7.5	7.7	8.5	8.3	8.5	8.4	8.6	7.9	7.5	8.2	8.1	7.8	7.2
5	7.5	7.0	5.6	4.6f	4.3f	4.1	4.7	6.7	7.6	8.0	7.5	6.8	6.8	7.1	7.2	7.6	7.8	7.5	7.0	6.7	6.8c	7.1	6.7	5.3	6.6
6	5.0c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.3	7.8	7.6	7.9c	p7.5c	7.1c	p7.0c	6.8c	p6.7c	p6.6c	...
7	p6.6c	6.5c	5.4c	4.5	3.4	3.0c	4.4	6.6c	7.2c	7.7	7.1	7.0	p7.3c	p7.6c	p7.8c	p8.7c	p8.5c	p8.4c	8.4c	...c	...c	...c	...c	...c	...
8	...c	...c	...c	...c	3.7c	3.3c	3.3c	p6.5c	7.5	7.9	8.0	8.0c	8.2c	p8.2c	p8.3c	8.3c	9.1c	p8.1c	p7.1c	6.1c	p6.8f	7.6f	p7.4c	7.2	...
9	p6.8c	p6.4c	p5.9c	5.5c	p4.4c	3.3c	4.5c	7.6	p7.8c	p8.1c	p8.3c	8.5	8.6	9.1	9.2	9.0	9.5c	9.2c	8.7c	8.3c	p8.0c	7.8	7.9	8.3	7.5
10	8.3	7.1	5.6	5.0c	p4.6	4.2c	4.6	8.9	8.1	8.8	p7.5c	7.1	7.3	7.9	8.5	8.5	8.0	8.3	8.0	6.9	6.9	7.2	7.6	...c	...
11	...c	...c	...c	...c	...c	...c	3.1	p5.6c	p8.4c	7.2	7.5	p7.4c	7.3	8.4	8.3	9.1	p9.1c	9.4	p9.6c	8.5	p8.4c	p8.5c	8.6c	7.0	...
12	4.2	3.1	2.4	2.1	2.0	1.7	4.2	6.6	7.1	7.3	7.0	6.5	6.5	7.0	7.8	7.9	8.4	8.8	8.5	7.4	7.3c	...c	...c	...c	...
13	...c	...c	...c	...c	3.3c	3.1	p5.1c	7.1	p7.7c	7.2c	7.0	...c	...c	...c	...c	...c	...c	...c	9.8	8.5	8.9	8.8	8.0	8.5	...
14	7.8	6.4	5.4	4.1	2.4	2.4	4.4	6.6	7.5	6.6	6.9	p6.8c	6.7	7.4	7.4	7.5	8.0	8.6	8.7	p7.5f	p7.2f	6.8f	p7.6f	8.5	6.6
15	7.2	5.7	5.0	3.9	3.4f	p3.2f	3.9	6.4	6.9	6.9	6.8	6.7	6.7	6.8	7.0	7.4	8.0	7.5	7.4	6.4	6.6	7.4	7.6	6.4	6.3
16	5.2	4.7	3.0	2.1	2.0	1.9	4.2	6.6	7.9	8.2	7.7	7.2	7.2	7.5	8.4	8.9	8.8	9.3	9.6	8.7	8.4	8.8	8.1	8.7	6.8
17	7.8	6.7	5.2	4.1	3.1	3.1	4.2	6.8	7.6	8.1	7.6	6.8	6.5	6.7	6.7	6.8	6.9	7.0	7.5	7.4	7.6	8.1	7.7	7.1	6.5
18	6.3	6.1	4.2	3.8	3.3	p2.9f	4.3	6.8	7.8	8.9	8.4	7.0	6.8	6.8	7.0	6.8	7.2	6.9	7.1	6.5f	6.6f	7.5	7.6	7.2	6.4
19	5.8	6.0	5.0	4.8	4.3	p4.0c	p5.6c	p6.7c	p7.7c	8.8	9.2	8.2	7.6	7.3	7.6	7.8	8.3	8.3	8.5	7.9	7.9	8.3	8.2	6.8	7.1
20	4.1	3.4	3.4	3.5f	2.5f	p2.3f	4.0	6.5	7.0	6.9	6.4	6.8	6.6	7.0	7.1	7.1	6.9	6.8	6.7	6.4	6.2	p6.2c	6.2	7.2	5.7
21	7.0	5.7	4.8	3.6	3.6	p3.2f	4.6	7.0	7.4	9.4	9.0	9.2	9.0	8.4	8.4	8.5	8.8	9.5	9.3	7.7	7.1a	p6.9a	p6.8a	p6.6a	7.1
22	p6.3a	p6.0f	5.7	4.3	p3.8f	p3.2f	4.4	6.8	7.8	8.5	9.2	9.0	8.8	8.4	8.0	7.5	6.9	6.6	7.0	7.0	6.6	6.4	6.6	6.9	6.7
23	6.7	6.0	5.0	4.7	4.7	4.4	4.2	6.8	7.4	7.7	7.8	7.1	6.8	6.9	7.0	6.9	7.0	7.0	6.8	6.0	p6.3f	6.6	p6.7f	6.8	6.4
24	6.5	5.9	5.1	4.0	3.4	3.3	4.3	6.5	7.7	7.8	7.1	6.5	6.5	6.5	6.9	7.2	7.5	7.7	8.0	7.1	6.3f	6.6f	6.7	6.7	6.3
25	6.9	5.6	4.2	3.6	p3.5f	p3.3f	4.3	6.0	7.0	7.6	7.9	7.7	7.0	7.4	8.0	8.3	7.8	7.2	7.4	6.7	6.1	6.5	6.5	6.7	6.4
26	6.1	7.0	5.6	4.5	4.3	p4.0f	4.4	6.6	8.0	8.1	6.8	7.9	8.8	8.7	9.2	8.7	8.0	7.2	8.3	7.4	6.3	6.2	6.0	6.6	6.9
27	7.8	6.2	5.7	5.0	4.4f	4.4f	5.4	7.6	8.9	9.3	9.0	7.7	7.5	7.8	7.3	7.4	8.0	9.3	9.4	8.8	p6.2a	7.5	8.2	p7.3f	7.4
28	p6.5a	p6.3a	p4.9a	p4.5a	p3.8a	p3.6a	4.6	7.8	9.2	9.2	7.9	7.5	7.2	7.4	7.5	7.9	8.8	9.4	9.1	8.4	8.3	8.5	8.1	8.4	7.3
29	7.0	6.4	6.0	6.2	4.3	2.5	5.0	7.7	8.2	p7.3c	6.4c	6.4	6.6	6.9	7.5	8.2	p9.2	8.9	p8.7c	p8.6c	p8.5c	8.4c	p8.4c	8.3	7.2
30	8.2	6.5	p5.6f	p5.0f	p4.6f	4.2f	5.3	8.1	9.2	9.6	8.3	7.0	6.9	7.3	7.9	8.5c	p9.6c	9.9	p9.8c	9.6c	p9.0c	8.5c	8.0	7.3	7.7
31																									
MEAN*	6.6	6.0	5.0	4.4	3.8	3.4	4.4	6.8	7.7	8.0	7.7	7.4	7.4	7.5	7.7	8.0	8.2	8.2	8.2	7.5	7.4	7.6	7.6	7.0	6.8

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 276

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1943 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS SEPTEMBER 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	250	290	290	270	230	250	270	320	330	320	360	380	350	310	300	270	250	260	290	260	240	240	250	284
2	230	250	250	260	220	220	250	230	230	300	300	330	320	350	330	300	290	240	270	280	230	220	210	220	264
3	240	250	250	260	270	250	250	270	300	310	300	340	330	350	360	330	290	230	250	260	240	220	220	220	275
4	230	230	230	250	310	300	240	260	290	310	340	360	400	340	340	310	300	240	260	270	270	230	240	230	282
5	240	220	260	260	250	240	250	270	300	320	350	370	375	350	330	330	320	230	270	250	q250c	240	220	230	280
6	q220c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	370	340	290	230	q280c	320	300	q240c	250	220	...
7	220	210	220	220	240	260	240	q270c	q280c	320	350	360	q340c	q320c	q300c	280	290	q240c	q260c	q280c	q280c	q260c	q230c	q220c	270
8	q220c	q220c	q220c	q220c	q270c	330	260	240	290	330	335	q340c	350	q330c	q320c	300	300	240	270	350	350	270	210	230	283
9	240	240	240	230	270	270	240	q260c	280	q300c	q310c	330	340	335	325	290	300	240	270	340	315	230	215	220	276
10	220	220	240	q240c	270	230	260	280	290	315	350	370	360	330	300	280	280	280	265	310	280	230	220	...c	268
11	...c	...c	...c	...c	...c	...c	q260c	q270c	q290c	300	355	q335c	310	340	310	300	290	250	250	260	q260c	q250c	240	210	...
12	220	240	250	265	250	250	240	280	300	340	360	400	410	360	330	305	290	250	280	370	q300c	q330c	q280c	q230c	297
13	q230c	q230c	q230c	q250c	250	240	250	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	250	300	300	290	235	230	...
14	220	230	220	230	260	245	240	270	315	340	330	q370c	410	370	330	290	280	240	270	320	270	230	210	200	279
15	200	220	230	250	290	270	250	270	300	335	360	350	370	360	355	320	300	245	310	325	240	220	210	210	283
16	220	210	200	240	255	270	240	265	290	310	350	350	370	340	340	300	290	240	220	250	240	210	200	220	268
17	220	200	210	220	220	270	240	260	290	310	330	370	390	360	370	330	310	230	250	250	220	220	200	200	270
18	200	190	230	240	280	300	230	250	290	310	320	360	380	380	350	320	300	230	270	330	260	220	190	200	276
19	210	210	220	230	250	250	240	q265c	q290c	280	310	330	340	350	330	325	300	230	240	260	240	220	200	210	264
20	230	230	240	230	250	260	240	270	300	310	370	370	370	340	335	330	310	230	240	290	260	230	260	210	279
21	210	210	210	240	300	300	230	250	290	280	300	320	340	305	325	300	270	240	260	350	340	300	220	220	275
22	230	210	210	230	270	280	240	250	290	285	310	320	325	320	350	320	300	230	260	280	260	220	230	220	268
23	210	220	230	240	270	270	240	270	300	300	350	340	340	360	360	350	300	300	260	290	240	220	220	220	279
24	220	210	200	230	260	270	230	270	290	320	350	370	370	360	330	300	320	230	260	320	300	230	210	220	278
25	210	230	220	260	300	280	240	270	310	310	320	330	360	360	340	330	310	230	250	280	280	250	230	230	280
26	220	220	210	240	280	280	230	270	300	350	330	320	320	320	320	320	300	240	240	260	260	290	270	230	277
27	230	230	220	270	270	280	240	260	280	320	340	340	320	340	300	290	270	230	270	320	240	240	220	240	273
28	250	280	290	q280a	280	260	230	260	290	320	350	350	320	330	315	290	250	240	250	270	240	210	210	240	275
29	270	270	290	240	220	210	220	230	250	q290c	q325c	330	340	340	310	270	280	250	270	q260c	q240c	230	280	260	271
30	250	270	280	290	280	240	230	240	260	300	340	320	310	335	320	290	265	275	260	275	280	q230c	220	225	274
31																									
MEAN*	226	229	235	247	264	263	241	261	269	312	334	348	353	344	331	308	292	242	260	294	269	241	226	224	276

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 277

SEPTEMBER 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1943

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.0	4.3	4.3	4.3	4.5	4.5	4.5	4.3	4.5	4.1	...	...
2	...	...	4.2	4.5	4.4	4.5	4.5	4.6	4.4	4.3	4.0	...	...
3	...	4.0	4.2	4.3	4.4	4.5	4.5	4.5	4.4	4.1	4.0	...	...
4	...	4.1	4.2	4.2	4.5	4.7	4.5	4.4	4.3	4.3	4.3	...	...
5	...	4.0	4.5	4.3	4.4	4.5	4.5	4.5	4.4	4.4	4.3	...	...
6	...	...c	...c	...c	...c	...c	...c	...c	4.6	4.5	4.2	...	...
7	...	p4.1c	p4.2c	4.4	4.6	4.5	p4.5c	p4.4c	p4.4c	4.3	4.2	3.9	...
8	...	p4.1c	4.2	4.5	4.5	p4.5c	4.5	p4.5c	p4.5c	4.5	4.2	...	...
9	...	p4.0c	p4.2c	p4.3c	p4.5c	4.6	4.6	4.6	4.7	4.3	4.2	...	...
10	...	3.9	4.2	4.5	4.7	4.5	4.6	4.5	4.4	4.2	4.2	4.0	...
11	...	p4.1c	p4.3c	4.4	4.7	p4.6c	4.6	4.6	4.4	4.2	4.1	...	...
12	...	4.0	4.2	4.4	4.6	4.7	4.6	4.5	4.5	4.4	4.2	...	...
13	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
14	...	3.9	4.3	4.4	4.4	p4.5c	4.6	4.6	4.5	4.2	4.0	...	...
15	...	4.1	4.4	4.3	4.6	4.4	4.4	4.5	4.5	4.3	4.1	...	...
16	...	4.0	4.3	4.4	4.5	4.5	4.6	4.5	4.3	4.3	4.1	...	...
17	...	4.0	4.4	4.3	4.4	4.5	4.5	4.4	4.4	4.3	4.2	...	...
18	...	4.0	4.3	4.4	4.3	4.5	4.5	4.5	4.4	4.3	4.2	...	...
19	...	p4.1c	p4.2c	4.3	4.5	4.4	4.5	4.5	4.4	4.3	4.1	...	...
20	...	4.4	4.4	4.4	4.5	4.4	4.5	4.5	4.5	4.4	4.2	...	...
21	...	4.1	4.2	4.4	4.5	4.6	4.6	4.5	4.5	4.3	4.0	...	...
22	...	4.0	4.3	4.4	4.5	4.5	4.5	4.5	4.6	4.3	4.3	...	...
23	...	4.3	4.4	4.4	4.6	4.5	4.7	4.5	4.4	4.5	4.0	4.0	...
24	...	4.3	4.3	4.5	4.5	4.5	4.4	4.5	4.4	4.4	4.4	...	...
25	...	4.0	4.3	4.4	4.5	4.3	4.6	4.5	4.4	4.3	4.2	...	...
26	...	4.2	4.4	4.5	4.4	4.5	4.5	4.5	4.3	4.4	4.2	...	...
27	...	4.2	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.2	4.2	...	...
28	...	4.0	4.4	4.6	4.6	4.5	4.5	4.6	4.4	4.4	4.2	...	...
29	...	4.2	4.3	p4.4c	4.4c	4.4	4.5	4.6	4.5	4.2	4.0	...	...
30	...	4.0	4.2	4.4	4.3	4.3	4.3	4.4	4.4	4.3	4.0	3.9	...
31													
MEAN*	...	4.1	4.3	4.4	4.5	4.5	4.5	4.5	4.4	4.3	4.2	4.0	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	220	210	200	200	200	190	200	200	200	210	...	...
2	...	...	210	210	200	200	200	200	200	200	210	...	...
3	...	220	210	210	210	200	200	200	210	200	200	...	...
4	...	230	220	210	200	200	180	200	200	200	200	...	...
5	...	230	210	210	200	200	200	190	190	190	200	...	...
6	...	...c	...c	...c	...c	...c	...c	...c	190	190	205	...	...
7	...	p200c	200c	210	210	200	p200c	p200c	210c	p190c	p210c	240	...
8	...	...	220	220	210	210	p200c	210	230	210	210	...	...
9	...	230	...c	...c	...c	...c	...c	...c	...c	p205c	220	...	...
10	...	240	220	p210c	p200c	p200c	200c	p200c	p200c	200	200	250	...
11	...	...c	...c	...c	...c	...c	...c	...c	p200c	205	230	...	...
12	...	225	215	220	210	200c	p200c	200	200	200	230	...	...
13	...	230	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
14	...	230	225	220	210	p205c	200	200	190	190	225	...	...
15	...	230	210	210	200	200	205	200	200	195	220	...	...
16	...	225	215	210	210	190	200	200	190	190	220	...	...
17	...	230	220	210	210	200	200	190	190	180	190	...	...
18	...	220	210	200	200	190	190	180	200	190	200	...	...
19	...	p220c	210	200	200	200	190	200	195	190	215	...	...
20	...	220	210	210	200	200	200	200	190	200	200	...	...
21	...	220	215	200	190	190	195	200	195	200	200	...	...
22	...	220	210	180	200	190	190	200	195	200	200	...	...
23	...	220	200	200	195	190	200	200	200	210	210	220	...
24	...	220	210	220	210	200	190	200	190	190	200	...	...
25	...	220	210	200	200	190	200	210	200	210	200	...	...
26	...	220	210	200	195	195	200	200	200	200	210	...	...
27	...	230	210	220	220	200	190	200	190	180	220	...	...
28	...	220	220	215	210	200	200	190	170	180	210	...	...
29	...	220	p210c	p210c	p200c	200	200	200	220	210	p230c	...	...
30	...	230	220	220c	210c	p200c	p200c	p200c	p200c	200	235	245	...
31													
MEAN*	...	224	213	209	204	198	197	199	198	197	211	239	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 278

SEPTEMBER 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1943

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.7	0.7	1.1	1.3	1.3	1.4	1.4	1.3	1.2	1.2	1.2	1.0	0.6	1.4	2.2	2.6	2.8	3.4	3.4	3.4	3.3	3.1	2.9	2.6	2.0	1.0
2	0.6	1.1	1.0	1.3	1.3	1.8	1.4	1.4	1.3	1.4	1.2	1.0	0.6	1.3	2.3	2.9	3.2	3.3	3.4	3.3	3.3	3.3	2.8	2.4	2.2	1.0
3	1.6	0.6	1.0	1.1	1.8	1.8	1.7	1.7	1.3	1.3	1.2	1.0	0.7	1.4	2.2	2.8	3.0	3.4	3.4	3.4	3.4	3.3	2.8	2.5	2.0	0.7
4	0.6	0.7	1.2	1.3	1.7	1.4	1.8	1.6	1.7	1.3	1.2	0.6	0.6	1.4	2.2	2.8	2.8	3.3	3.4	3.3	3.1	3.1	2.8	2.6	2.1	0.9
5	0.6	1.0	1.2	1.0	1.8	1.7	1.7	1.8	1.7	1.4	1.2	1.0	0.6	1.4	2.4	2.8	3.1	3.2	3.4	3.4	3.4	3.3	3.0	2.6	2.1	1.0
6	...c	...c	...c	...c	...c	...c	...c	...c	1.8	1.3	1.2	1.1	p0.8c	...c	...c	...c	...c	...c	...c	...c	...c	3.3	2.9	2.7	2.1	p1.0c
7	p1.1c	1.6	1.1	1.2	1.4	1.8	...c	...c	...c	...c	...c	p1.2c	p0.9c	1.6	p2.1c	2.5	3.1	3.4	3.4	p3.6c	p3.6c	3.4	p3.2c	p2.7c	2.3	p1.2c
8	0.6	1.2	1.2	1.3	1.4	...c	...c	...c	...c	p1.2c	1.2	p1.1c	p0.9c	1.2	1.6	2.8	3.3	3.4	p3.4c	p3.6c	p3.6c	p3.3c	p3.0c	2.7	p2.4c	p1.2c
9	0.6	1.4	...c	...c	...c	...c	...c	...c	...c	p1.2c	1.2	1.2	p1.0c	1.0	2.4	...c	...c	...c	...c	...c	...c	...c	p3.0c	2.6	2.4	1.2
10	1.2	1.2	1.3	1.3	...c	...c	...c	...c	1.2	1.2	1.2	1.2	1.1	1.6	2.4	p3.1c	p3.2c	p3.4c	p3.5c	p3.6c	p3.4c	p3.2c	3.1	2.5	2.1	1.3
11	p1.2c	p1.2c	p1.2c	p1.2c	p1.4c	p1.7c	p1.9c	p1.9c	p1.8c	1.2	1.0	0.8	0.7	p1.2c	...c	...c	...c	...c	...c	...c	...c	p3.1	3.0	2.8	2.1	1.0
12	p1.0c	0.9	1.2	1.2	1.2	p2.0c	p1.8c	p1.1c	1.0	1.0	1.1	1.0	p0.9c	1.6	2.3	2.7	3.2	p3.4c	p3.4c	p3.5c	p3.5c	3.2	3.0	2.8	2.0	1.0
13	0.7	1.3	p1.2c	p1.2c	p1.3c	...c	...c	...c	...c	...c	...c	...c	1.1	1.6	2.5	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.3
14	0.6	1.1	1.2	1.3	p1.4c	p1.6c	p1.7c	1.4	1.3	1.2	1.2	1.0	0.6	1.6	2.4	2.7	3.0	p3.1c	p3.3c	p3.4c	3.5	p3.3c	3.1	2.5	2.1	1.1
15	1.0	1.2	1.2	1.4	1.4	1.4	1.8	1.8	1.8	1.4	1.2	1.0	0.6	1.4	2.4	2.8	2.9	3.3	3.4	3.4	3.4	3.2	3.1	2.8	2.2	1.2
16	0.8	1.0	1.2	1.3	1.5	1.8	1.4	1.7	1.8	1.4	1.3	1.2	1.0	1.7	2.6	3.0	3.2	3.2	3.4	3.4	3.4	3.3	2.9	2.6	2.1	1.2
17	0.9	1.2	1.4	1.4	1.8	1.8	1.8	1.8	1.8	1.4	1.4	1.2	1.0	1.6	2.5	3.0	3.2	3.4	3.5	3.5	3.4	3.2	2.9	2.6	2.1	1.3
18	1.0	1.2	1.3	1.4	1.8	1.8	1.8	1.5	1.4	1.3	1.2	1.2	0.8	1.6	2.5	3.0	3.3	3.4	3.5	3.4	3.5	3.3	3.0	2.7	2.0	1.1
19	...c	...c	...c	1.3	1.7	1.4	1.7	1.7	1.4	1.4	1.3	1.2	1.0	p1.6c	p2.4c	p2.9c	3.2	3.2	3.4	3.4	3.3	3.3	2.9	2.6	2.2	1.8
20	1.0	1.2	1.2	1.3	1.7	1.4	1.4	1.4	1.4	1.4	1.2	1.2	0.8	1.6	2.3	2.7	3.4	3.3	3.4	3.4	3.4	3.3	3.0	2.5	2.2	1.2
21	1.0	1.1	1.3	1.4	1.7	1.8	1.8	1.7	1.4	1.4	1.0	1.0	0.8	1.7	2.4	3.2	3.4	3.5	3.3	3.4	3.5	3.3	2.9	2.5	2.2	0.8
22	1.2	1.1	1.4	1.4	1.4	1.8	1.4	1.8	1.7	1.4	1.3	1.2	0.9	1.7	2.4	3.0	3.1	3.4	3.4	3.4	3.3	2.9	2.7	2.1	1.0	0.6
23	1.0	1.2	1.2	1.4	1.4	1.4	1.7	1.4	1.8	1.8	1.4	1.2	0.6	1.5	2.4	2.8	2.6	3.4	3.4	3.5	3.4	3.3	3.4	2.7	2.2	1.0
24	1.0	1.2	1.3	1.8	1.8	1.8	1.8	1.8	1.4	1.4	1.3	1.2	0.6	1.7	2.4	2.8	3.2	3.3	3.4	3.4	3.3	3.1	2.9	2.6	2.2	1.0
25	0.9	1.2	1.2	1.4	1.4	1.8	1.8	1.8	1.7	1.4	1.2	1.2	0.7	1.6	2.4	2.8	3.2	3.4	3.5	3.5	3.4	3.4	2.7	2.7	2.2	0.8
26	1.0	1.2	1.2	1.3	1.4	1.7	1.8	2.0	1.4	1.3	1.2	1.1	0.8	1.8	2.5	3.0	3.2	3.4	3.4	3.5	3.4	3.3	2.8	2.6	2.1	1.0
27	0.7	1.2	1.2	1.3	1.3	1.4	1.8	1.4	1.8	1.4	1.3	1.2	0.6	1.7	2.3	2.7	3.2	3.3	3.4	3.4	3.3	3.3	3.0	2.9	2.2	1.2
28	1.1	1.2	1.3	1.4	1.8	1.8	1.8	1.8	1.9	1.4	1.2	1.2	1.0	1.6	2.4	3.0	3.2	3.3	3.4	3.4	3.5	3.4	3.0	2.6	2.2	1.2
29	...c	...c	...c	...c	...c	2.0	2.0	2.0	1.3	1.4	1.1	0.8	0.8	p1.6c	2.5	p2.9c	p3.2c	p3.2c	p3.2c	p3.6c	3.2	3.3	2.8	2.3	2.0	1.6
30	0.6	0.8	1.1	1.2	p2.0c	p2.1c	p1.9c	p1.7c	p1.6c	p1.5c	p1.4c	1.3	0.8	1.6	2.4	2.8	p3.2c	p3.4c	p3.3c	p3.2c	p3.1c	p2.8c	2.9	2.5	2.2	1.2
31																										
* MEAN	0.9	1.1	1.2	1.3	1.5	1.7	1.7	1.6	1.5	1.3	1.2	1.1	0.8	1.5	2.4	2.8	3.1	3.3	3.4	3.4	3.4	3.2	3.0	2.6	2.1	1.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 279

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1943 | OCTOBER 1943

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.4	5.3	5.0	4.4	4.0	3.9f	4.9	7.7	8.5	8.4	6.8	7.1	7.2	7.9	8.3	8.4	8.6	9.4	10.6	9.9	9.6	8.6	p8.9f	8.0	7.4
2	7.0	5.3	4.7	4.4	4.4	4.0	5.3	7.6	9.2	9.5	7.0	6.9	6.7	7.0	7.8	8.4	9.1	9.6	9.7	9.7	7.8	p8.0f	p8.2f	8.3	7.3
3	7.4	6.0	5.4	4.7	4.0	2.9	4.8	7.1	7.9	8.8	7.7	6.6	6.8	7.3	8.4	9.4	9.7	9.8	10.0	9.7	9.8	10.7	9.7	7.8	7.6
4	6.8	6.1	4.6	3.8	3.7	3.0	3.9c	p6.0c	p8.2c	10.3	9.4	7.8	7.3	7.5	7.8	8.1	8.4	8.6	9.2	9.3	8.4	7.9	7.9	7.8	7.2
5	7.6	6.9	5.5	4.4	3.9	3.3	5.5	7.5	9.2	9.9	9.6	7.7	p7.3c	p7.4c	p7.7c	p8.0c	p8.3c	p8.2c	p8.5c	p8.3c	9.0	8.3	7.5	8.0	7.4
6	8.4c	7.0c	5.7c	4.3c	p3.6c	p3.3c	p5.6c	p7.4c	8.1	8.8	9.1	p8.2c	7.2c	7.2	7.6	7.9	8.2	7.8	7.9	7.3	p7.5f	7.7	p7.9f	7.7	7.1
7	7.7	6.6	5.5	4.1	3.4	3.3	5.7	7.2	8.1	8.5	7.7	8.2	8.4	7.6	7.5	7.5	7.2	7.3	8.0	8.0	8.0	8.6	8.5	8.1	7.1
8	7.3	6.0	4.6	4.1f	p3.4f	2.8f	5.2	6.9	7.3	8.4c	9.5	9.6	8.3c	7.6	7.6	8.2	8.4	8.5	8.6	8.6	9.0	9.5	9.0	7.2	7.3
9	7.6	6.8	7.0	5.4	p4.6f	4.4f	5.3	7.0	7.6	8.1	8.3	8.2	7.9	7.7	8.5	9.6	9.6	9.6	9.8	p9.6c	9.1c	9.0c	8.2	8.0	7.8
10	7.6	6.9	5.8	4.8	3.8	p3.2f	5.3	7.6	8.7	7.2	7.7	9.0	9.1	9.1	9.7	9.9	10.3	10.2	10.0	p8.8c	p9.0c	p8.9c	9.0	p8.3c	7.9
11	p7.6c	7.1	5.9	5.4	5.3	5.6	6.3	7.7	8.8	8.1	7.5	7.3c	7.3c	7.5c	7.7c	8.3c	8.4	8.5	8.5	p8.7c	p8.8c	p8.8c	p9.1c	p8.5c	7.6
12	p7.5c	p6.4c	3.6c	3.2c	2.8c	2.5	p5.1c	7.7	8.4	8.8	8.1	7.9	7.9	8.1	8.7	9.6	9.7	9.6	9.5	8.6	8.5	8.6	9.2	8.7	7.4
13	7.4	5.8	4.2	3.2	2.6	2.2	5.4	7.0	6.8	6.4	6.2	6.3	6.4	6.8	7.6	8.3	9.1	9.5	9.5	8.6	8.9f	8.7	9.5	8.7f	6.9
14	7.6	5.6	3.9	2.7	2.3	2.1	5.2	7.0	8.4	8.5	6.8	6.8	6.6	6.5	7.0	7.6	8.3	8.6	8.6	7.9	p7.9f	8.0	7.7	7.3	6.6
15	6.3	3.9	2.1b	1.4b	p1.0b	p1.5b	5.2	7.1	8.6	9.0	8.0	7.0	6.5	6.9	7.2	7.8	8.9	9.9	9.7	8.4	p8.3f	8.1	7.4	7.1	6.6
16	6.4	5.4	4.2	3.4	3.3	2.7	5.6	7.1	8.0	8.0	6.9	6.6	6.5	6.2	6.2	6.5	7.2	p8.0a	8.3	7.9	7.7	7.1	6.6	7.7	6.4
17	7.4	6.0	4.5	3.6	2.5	2.6	5.5	7.3	8.1	8.8	8.2	7.0	6.9	6.8	6.6	7.0	7.8	8.5c	8.9c	7.5	7.0	6.4	6.5	6.4	6.6
18	6.6	5.7	3.9	2.9	2.4	2.5	4.7c	p6.0c	p7.4c	8.7	8.9	8.3	7.5	7.0	6.9	7.2	7.8	8.6a	8.7	8.0	8.0	7.7	8.4	7.9	6.7
19	6.6	5.4	5.0	p4.3f	p3.5f	2.8f	5.4	7.4	7.8	8.1	8.8	8.5	7.9	7.2	7.1	7.0	7.4	p7.6c	8.3	7.9	7.7	7.0	7.0	7.3	6.8
20	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.3	8.5	7.4	7.3	6.5	6.6	7.3	7.6	7.6	7.7	7.7	6.9	6.3	7.4	8.5	...
21	7.9	5.6	4.3	3.4	3.5	3.4	5.4	7.4	8.7	9.0	8.6	7.9	7.5	7.0	6.9	6.9c	6.8	7.3	7.4c	8.0	6.7	p6.6f	p6.5f	6.4	6.6
22	6.4	5.0	3.5	2.8	2.7	2.7f	5.5	6.9	7.9	8.6	9.5	9.5	7.5	7.2	7.7	7.9	7.9	8.2	8.4	7.8	7.2	p6.9a	6.8a	p6.7a	6.7
23	6.6	6.3	4.9	4.1	3.9	3.9	5.7	7.6	8.6	7.8	7.5	7.8	8.0	7.5	7.5	7.8	8.3	8.6	8.9	8.4	7.8	7.5	p7.6f	p7.8f	7.1
24	7.9	6.6	4.4	3.0	2.2	2.1	5.4	7.2	8.4	8.6	8.9	10.0	10.1	8.8	8.4	8.6	8.8	9.3	9.9	8.8	8.7	8.4	8.1	9.3	7.6
25	8.9	7.2	6.6	6.1	4.9	4.5	5.7	7.8	8.4	8.2	8.5	9.0	8.8	8.3	8.4	8.4	8.8	8.7	9.0	8.6	7.8	7.9f	8.0f	8.8f	7.8
26	8.2	6.4	5.0	5.8	3.9f	3.2	5.9	8.4	8.8	7.4	7.8	9.2	10.2	10.2	9.1	9.1	9.3	10.3	10.2	9.2	8.5	9.3f	7.7f	6.6f	7.9
27	6.5	5.6	5.5	4.4	3.8f	3.4f	6.3	8.5	9.5	9.6	8.6	8.5	8.3	8.3	9.0	9.3	9.3	9.0	8.9	8.5	7.9	6.6f	6.5f	7.7f	7.5
28	7.2	6.6	5.3	p4.6f	3.9	3.2f	6.1	8.1	9.0	9.0	8.3	8.0	8.4	8.5	8.6	9.3	10.0	10.5	10.7	10.6	9.0	8.1	6.7	7.8	7.8
29	8.2	6.2	5.8f	6.5f	6.4f	3.5	5.9	8.3	9.3	10.0	p8.9c	7.8	8.0	7.8	p8.0c	8.3c	8.4	9.8	10.0	9.6	9.3	8.7	8.5	7.6f	8.0
30	7.6f	...c	...c	...c	...c	...c	...c	...c	...c	10.5c	10.5c	p9.7c	p9.0c	8.2c	8.3	8.5	8.7	9.4	9.5	8.7c	8.7	8.3	9.8f	8.4f	...
31	8.0	7.1f	5.6	5.2	4.8f	4.5f	7.1	9.1	10.4	10.7	9.9	9.6	9.0	7.8	8.1	8.6	8.8	9.4	10.0	9.1	7.9	8.5f	p7.9f	p7.8c	8.1
MEAN*	7.4	6.1	4.9	4.2	3.6	3.2	5.5	7.4	8.4	8.7	8.3	8.0	7.8	7.6	7.8	8.2	8.6	8.9	9.1	8.6	8.3	8.1	8.0	7.8	7.3

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 280

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

OCTOBER 1943 (TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME) OCTOBER 1943

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	225	240	250	300	320	280	240	265	300	300	340	330	320	330	300	280	260	230	250	270	240	250	260	240	276
2	220	240	230	240	250	210	250	260	290	300	320	350	350	350	330	300	300	250	240	290	320	330	240	250	280
3	240	250	220	230	240	230	230	250	300	310	340	360	340	370	320	310	290	290	250	290	230	220	210	240	273
4	250	220	240	240	260	230	240	q250c	q270c	280	300	340	320	340	310	300	290	240	230	270	230	230	220	220	263
5	230	210	230	230	220	230	230	240	270	280	300	350	q330c	q340c	q310c	q300c	q300c	240	q240c	q280c	290	220	200	210	262
6	220	230	240	230	260	290	230	q240c	250	310	330	q330c	340	350	320	310	300	240	240	290	300	220	220	220	271
7	220	220	200	240	240	260	240	250	290	350	310	340	360	350	340	300	270	250	250	270	260	230	210	210	269
8	220	240	260	300	290	320	245	240	270	300	320	330	340	350	330	310	290	240	250	280	250	220	205	220	276
9	250	290	220	220	340	290	250	280	300	300	310	320	340	320	310	300	290	250	250	260	240	220	200	210	273
10	240	210	210	240	290	310	240	270	290	320	340	320	300	300	330	310	280	230	250	280	280	270	230	270	275
11	270	220	220	250	250	220	240	280	300	310	340	330	340	q330c	330	300	290	250	270	...c	...c	...c	...c	...c	...
12	...c	...c	300	q320c	q400c	q360c	q310c	270	280	310	310	320	350	320	310	300	280	250	270	280	300	250	260	240	...
13	210	220	220	230	230	230	230	270	300	330	350	370	350	340	340	310	290	240	250	260	270	240	220	230	272
14	220	210	230	240	250	260	240	270	300	330	360	370	360	340	340	330	280	260	250	280	250	240	240	230	278
15	200	210	240	260	q280b	300	230	250	280	300	340	370	340	370	340	320	300	230	230	260	260	220	240	240	275
16	240	220	220	230	240	240	230	250	290	330	350	370	390	370	380	320	300	230a	240	260	260	220	230	220	276
17	200	210	210	230	240	260	270	260	290	310	340	350	350	360	360	340	300	230	230	260	250	260	240	260	275
18	260	230	230	240	270	300	240	q260c	q280c	300	330	350	350	350	350	320	290	210a	220	270	240	220	220	220	273
19	230	230	230	270	230	230	230	250	280	300	330	350	360	350	350	330	280	230	230	240	230	225	220	200	267
20	...c	...c	...c	...c	...c	...c	...c	...c	...c	320	330	350	350	380	330	320	300	250	250	280	260	240	230	220	...
21	220	230	230	230	270	300	240	250	290	300	330	360	360	350	350	320	310	230	240	250	280	340	280	240	283
22	210	230	230	245	270	290	230	260	270	300	320	330	360	330	330	300	300	230	240	280	290	270	330	280	280
23	260	230	230	240	240	270	240	270	300	320	350	340	320	320	330	320	300	240	240	270	270	250	300	210	278
24	230	210	220	230	250	280	240	240	250	290	340	330	335	300	310	350	310	250	240	250	270	340	320	230	276
25	260	270	260	230	230	280	250	280	290	320	330	330	300	300	335	330	290	270	240	280	310	330	260	250	284
26	250	260	250	240	230	280	240	270	300	315	320	290	300	325	330	330	290	265	240	270	270	250	300	340	281
27	280	280	250	240	240	270	240	270	290	300	320	330	320	320	310	310	290	275	270	310	320	370	340	280	293
28	220	240	280	370	360	290	250	290	310	325	325	340	360	340	300	q310a	320a	280	270	270	250	300	350	310	302
29	240	250	290f	270	230	250	240	260	290	310	q320c	330	315	300	q300c	310	275	245	240	250	240	260	340	310	278
30	250	...c	...c	...c	...c	...c	...c	...c	...c	310	290	330	350	340	q330c	325	q310c	260	230	q260c	275	315	290	280	...
31	250	240	260	290	330	260	240	265	290	300	320	345	380	360	310	300	290	265	260	290	340	335	250	265	293
MEAN*	235	234	238	253	267	270	242	261	287	309	328	340	341	339	328	313	292	247	245	272	269	263	255	245	278

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 281

OCTOBER 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1943

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.1	4.4	4.4	4.5	4.6	4.6	4.7	4.6	4.2	4.0	...	...
2	...	4.1	4.4	4.5	4.5	4.6	4.7	4.6	4.6	4.6	4.4	...	...
3	...	4.1	4.4	4.5	4.6	4.7	4.5	4.8	4.5	4.6	4.4	4.2	...
4	...	p4.1c	p4.4	4.6	4.6	4.7	4.6	4.7	4.5	4.5	4.2	...	...
5	...	4.1	4.5	4.3	4.5	4.7	p4.7c	p4.6c	p4.5	p4.4c	p4.2c	...	...
6	...	p4.2c	4.4	4.6	4.6	p4.6c	4.7	4.6	4.5	4.4	4.2	...	...
7	...	4.2	4.4	4.5	4.5	4.6	4.6	4.6	4.6	4.3	4.0	...	...
8	...	3.9	4.2	4.5	4.5	4.6	4.7	4.7	4.5	4.5	4.3	...	...
9	...	3.9	4.5	4.5	4.5	4.5	4.6	4.5	4.5	4.4	4.2	...	...
10	...	4.3	4.3	4.5	4.5	4.6	4.6	4.6	4.9	4.9	4.2	...	...
11	...	4.2	4.4	4.4	4.6	4.6	4.6	p4.5c	4.5	4.4	4.3	...	...
12	...	3.9	4.3	4.5	4.5	4.6	4.6	4.5	4.5	4.5	4.2	...	...
13	...	4.1	4.2	4.5	4.4	4.5	4.4	4.5	4.4	4.5	4.3	...	...
14	...	4.3	4.3	4.3	4.5	4.5	4.4	4.5	4.5	4.2	4.2	...	...
15	...	4.2	4.2	4.4	4.4	4.5	4.5	4.4	4.5	4.4	4.3a	...	...
16	...	4.2	4.2	4.5	4.6	4.5	4.4	4.4	4.4	4.3	4.2	...	...
17	...	4.2	4.3	4.5	4.4	4.5	4.6	4.5	4.5	4.4	4.4	...	...
18	...	p4.2c	p4.3c	4.4	4.4	4.5	4.4	4.4	4.5	4.2	4.2	...	...
19	...	4.2	4.4	4.5	4.6	4.5	4.6	4.4	4.5	4.4	4.3	...	...
20	...	p4.2c	p4.3c	4.5	4.5	4.5	4.5	4.5	4.5	4.3	4.3	...	...
21	...	4.2	4.4	4.5	4.6	4.7	4.5	4.5	4.5	4.3	4.3	...	...
22	...	4.3	4.3	4.3	4.4	4.5	4.6	4.6	4.3	4.3	4.2	...	...
23	...	4.2	4.4	4.5	4.5	4.5	4.4	4.5	4.5	4.4	4.3	...	...
24	...	4.2	4.3	4.5	4.8	4.6	4.5	4.3	4.2	4.2	4.2	...	...
25	...	4.1	4.3	4.4	4.6	4.9	4.4	4.3	4.5	4.6	4.2	4.0	...
26	...	4.2	4.5	4.5	4.5	4.5	4.5	4.4	4.5	4.6	4.3	4.2	...
27	...	4.2	4.3	4.4	4.5	4.6	4.7	4.5	4.5	4.4	4.3	4.0	...
28	...	4.3	4.5	4.4	4.5	4.7	4.7	4.5	4.4	p4.3a	4.2a	...	...
29	...	4.2	4.3	4.4	p4.4c	4.5	4.6	4.5	p4.6c	4.7	4.2	...	...
30	...	p4.2c	p4.3c	4.4	4.6	4.7	4.5	4.4	p4.4c	4.5	4.4	...	...
31	...	4.2	4.3	4.5	4.4	4.6	4.6	4.5	4.3	4.3	4.2	4.0	...
* MEAN	...	4.2	4.4	4.5	4.5	4.6	4.6	4.5	4.5	4.4	4.2	4.1	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	220	220	200	200	200	200	210	200	220	...	...
2	...	230	210	220	200	200	200	190	200	210	250	...	...
3	...	230	220	220	210	220	200	200	200	200	210	240	...
4	...	p200c	p210c	210	200	200	200	200	200	210	200	...	...
5	...	220	210	200	200	190	p190c	p200c	p200c	p210c	p220c	...	...
6	...	220	210	215	200	p190c	190	190	190	190	200	...	...
7	...	220	220	210	210	200	200	195	200	210	210	...	...
8	...	225	210	210	205	200	200	200	200	190	200	...	...
9	...	220	220	215	210	200	200	200	200	200	225	...	...
10	...	220	210	200	200	200	200	200	200	215	220	...	...
11	...	220	210	200	200	200	200	200	200	210	215	...	...
12	...	p220c	210	200	190	200	190	190	190	220	220	...	...
13	...	210	200	190	190	200	180	190	190	220	220	...	...
14	...	210	200	210	200	200	200	200	185	p200c	210	...	...
15	...	210	200	200	200	200	190	190	180	180	230	...	...
16	...	210	200	210	200	210	200	190	190	195	210	...	...
17	...	220	210	200	210	190	210	190	190	190	220	...	...
18	...	p220c	p210c	210	210	200	200	190	190	200	230	...	...
19	...	220	210	200	200	200	190	190	200	200	210	...	...
20	...	p220c	p210c	210	200	190	200	200	190	190	225	...	...
21	...	220	200	190	210	200	200	200	190	190	220	...	...
22	...	220	210	200	210	200	200	200	200	190	200	...	...
23	...	220	220	220	210	210	200	200	190	190	220	...	...
24	...	220	220	220	220	220	210	200	210	190	230	...	...
25	...	230	230	220	220	205	210	205	210	200	230	250	...
26	...	220	220	225	220	210	210	200	200	210	235	245	...
27	...	230	225	220	210	210	210	210	210	200	230	250	...
28	...	230	230	225	220	205	210	210	210	p200a	p230a	...	...
29	...	230	225	220	p220c	210	210	200	p200c	190	230	...	...
30	...	p230	p225c	220	p220c	p210c	p210c	p200c	p200c	210	220	...	...
31	...	235	225	220	210	210	215	215	200	210	230	245	...
* MEAN	...	222	214	211	207	203	201	198	198	201	220	246	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 282

OCTOBER 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1943

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	1.3	1.4	1.4	2.2	1.8	1.8	1.8	1.8	1.4	1.2	1.1	0.9
2	0.6	1.2	1.1	1.2	1.4	1.4	1.8	1.4	1.[illegible]	1.4	1.2	1.2	0.8
3	0.9	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.3	1.2	1.0	0.6
4	1.0	pl.2c	pl.2c	1.2	1.3	1.3	1.4	1.7	1.4	1.3	1.2	1.0	0.8
5	0.6	1.0	1.2	1.3	1.4	1.4	pl.6c	pl.7c	pl.6c	pl.2c	pl.2c	pl.0c	p0.8c
6	p0.8c	pl.4c	1.6	1.4	1.4	pl.6c	1.8	1.7	1.8	1.2	1.1	1.0	0.7
7	1.2	1.2	1.2	1.3	1.8	1.8	1.8	1.8	1.7	1.4	1.2	1.1	1.0
8	1.1	1.2	1.3	1.8	1.7	1.4	1.7	1.4	1.3	1.4	1.2	0.9	1.1
9	1.0	1.2	1.2	1.4	1.4	1.4	1.7	1.7	1.4	1.4	1.2	1.1	1.0
10	1.0	1.2	1.2	1.4	1.7	1.7	1.8	1.7	1.7	1.4	1.2	1.0	0.6
11	1.0	1.2	1.2	1.2	1.3	1.7	1.7	1.7	1.3	pl.2c	pl.2c	pl.1c	p0.8c
12	pl.0c	pl.2c	pl.6c	1.4	1.4	1.4	1.8	1.4	1.8	1.4	1.4	1.2	1.0
13	1.0	1.3	1.4	1.4	1.7	1.4	1.4	1.4	1.4	1.3	1.3	1.0	0.6
14	1.0	1.2	1.2	1.2	1.4	1.8	1.4	1.4	1.4	1.4	1.2	1.0	1.0
15	1.1	1.2	1.2	1.4	1.7	1.8	1.8	1.8	1.4	1.4	1.3	1.2	0.7
16	1.2	1.2	1.3	1.4	1.4	1.8	1.8	1.4	1.3	1.3	1.2	1.2a	0.6
17	1.2	1.2	1.3	1.4	1.8	1.8	1.8	1.4	1.4	1.4	1.2	1.2	0.7
18	0.9	pl.2c	pl.2c	1.4	1.7	1.4	1.4	1.4	1.7	1.8	1.3	1.2a	0.6
19	1.0	1.2	1.2	1.4	1.4	1.5	1.8	1.8	1.4	1.4	1.3	pl.3c	1.2
20	pl.0c	pl.0c	pl.3c	1.4	1.8	1.7	1.7	1.7	1.4	1.3	1.2	1.0	1.0
21	1.0	1.0	1.6	1.8	2.0	2.1	2.2	2.3	2.0	pl.4c	1.2	1.0	1.1
22	0.6	1.2	1.8	1.7	1.8	1.7	1.7	1.7	1.4	1.4	1.2	1.0	0.9
23	0.8	1.2	1.3	1.6	1.7	1.7	1.7	1.7	1.6	1.3	1.2	1.2	0.9
24	1.2	1.3	1.8	1.7	1.7	1.7	1.8	1.8	1.8	1.4	1.2	1.2	1.0
25	1.0	1.2	1.4	1.4	1.9	1.9	1.9	1.8	1.8	1.3	1.2	1.2	0.8
26	0.6	1.3	1.4	1.8	1.8	2.0	1.9	1.9	1.7	1.7	1.2	1.2	1.0
27	0.6	1.2	1.7	1.8	1.8	1.6	1.9	1.8	1.8	1.7	1.4	1.2	1.2
28	1.0	1.2	1.7	1.7	1.7	1.8	1.9	1.9	2.0	1.7	1.3	1.2	1.0
29	1.2	1.3	1.7	2.0	pl.9c	1.9	2.1	1.9	pl.9c	1.8	1.8	1.4	1.1
30	pl.2c	pl.5c	pl.8c	1.8	pl.9c	pl.9c	p2.0c	1.9	1.9	1.8	1.5	1.5	1.0
31	1.2	1.8	1.9	2.0	2.2	1.9	2.0	2.1	1.9	1.8	1.4	1.3	1.2
* MEAN	1.0	1.2	1.4	1.5	1.7	1.7	1.8	1.7	1.6	1.4	1.3	1.1	0.9

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.8	2.4	3.0	3.4	3.5	3.4	3.4	3.4	3.3	2.9	2.7	1.7	1.3
2	1.6	2.4	2.8	3.2	3.4	3.4	3.5	3.4	3.3	3.0	2.7	2.1	1.1
3	1.6	2.3	2.8	3.0	3.4	3.4	3.4	3.4	3.3	3.0	2.8	2.2	1.0
4	1.2	p2.4c	p2.8c	3.2	3.4	3.5	3.5	3.4	3.3	2.6	2.6	2.1	1.0
5	1.9	2.5	2.8	3.3	3.4	3.5	p3.4c	p3.4c	p3.3c	p2.8c	p2.6c	p2.1c	pl.3c
6	pl.4c	p2.5c	3.1	3.2	3.4	p3.4c	3.4	3.3	3.3	3.0	2.5	2.1	1.5
7	pl.6c	2.5	3.1	3.2	3.4	3.6	3.5	3.5	3.4	3.0	2.7	2.2	1.2
8	1.9	2.2	3.0	3.3	3.4	3.4	3.3	3.4	3.2	2.9	2.6	2.2	1.1
9	1.8	2.6	2.8	3.2	3.3	3.4	3.5	3.4	3.3	3.0	2.7	2.0	1.1
10	1.9	2.4	2.8	3.2	3.2	3.5	3.4	3.4	3.3	3.0	2.6	2.0	1.0
11	1.8	2.5	2.9	3.2	3.3	3.4	3.5	3.1	2.8	3.0	p2.7c	pl.3c	pl.1c
12	pl.8c	p2.6c	p2.8c	3.3	3.4	3.5	3.5	3.4	3.4	2.8	2.1	1.7	1.2
13	1.8	2.6	2.9	3.2	3.2	3.4	3.4	3.5	3.4	3.0	2.5	2.2	1.8
14	1.9	2.7	2.7	3.2	3.4	3.4	3.5	3.4	3.4	3.1	3.0	2.5	1.4
15	1.8	2.5	2.8	3.2	3.3	3.3	3.4	3.4	3.2	2.9	2.8	2.1	1.4
16	1.8	2.5	2.8	3.1	3.3	3.4	3.4	3.3	3.2	3.0	2.6	2.0a	1.1
17	1.8	2.7	2.8	3.2	3.3	3.4	3.5	3.3	3.1	3.0	2.8	2.2	1.2
18	1.6	p2.7c	p2.8c	2.9	3.2	3.6	3.4	3.5	3.4	3.0	2.9	2.0a	1.0
19	1.9	2.8	3.0	3.3	3.5	3.5	3.7	3.4	3.4	3.2	2.9	p2.3c	1.3
20	p2.0c	p2.7c	p3.0c	3.4	3.4	3.4	3.6	3.3	3.3	3.9	2.6	2.1	1.0
21	2.0	2.7	3.0	3.2	p3.4c	3.5	3.2	3.3	3.2	2.8	2.9	2.2	pl.1c
22	2.0	2.6	3.0	3.3	3.5	3.5	3.4	3.4	3.1	3.0	2.6	2.0	1.2
23	2.0	2.7	2.8	2.2	3.2	3.2	3.4	3.4	3.2	2.8	2.8	2.2	1.2
24	2.0	2.5	2.9	3.2	3.3	3.3	3.4	3.4	3.3	2.8	2.6	2.1	1.1
25	2.1	2.5	3.0	3.2	3.4	3.6	3.4	3.6	3.4	3.0	2.9	2.2	1.2
26	1.9	2.6	2.5	2.9	3.2	3.4	3.5	3.3	3.2	3.0	2.7	2.2	pl.2a
27	2.0	2.6	3.0	3.3	3.4	3.5	3.4	3.5	3.3	2.8	2.9	2.2	1.2
28	1.1	2.6	2.9	3.2	3.4	3.6	3.7	3.6	3.3	p3.0a	p2.9a	2.8	1.2
29	1.9	2.5	3.0	p3.3c	p3.4c	p3.5c	p3.6c	3.6	p3.4c	3.2	3.0	2.3	pl.7c
30	pl.9c	p2.5c	p3.0c	3.2	p3.4c	p3.5c	p3.6c	p3.4c	p3.2c	3.0	2.6	2.0	pl.7c
31	2.0	2.6	3.0	3.4	3.6	3.6	3.6	3.5	3.4	3.2	2.7	2.1	1.2
* MEAN	1.8	2.5	2.[illegible]	3.2	3.4	3.4	3.5	3.4	3.3	3.0	2.7	2.1	1.2

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 283

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1943 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — NOVEMBER 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.6c	6.9c	5.6c	5.1c	4.3	3.7	p5.8c	p7.5c	p8.5c	p8.6c	p8.6c	p8.2c	7.8	7.6	8.1	8.3	8.4	8.8	9.2	8.8	8.0	8.2f	p7.5f	p7.0f	7.4
2	p6.0f	4.8f	4.1f	3.8f	3.6f	3.5f	6.5	7.9	9.0	9.4	9.4	8.3	7.8	7.7	7.7	8.3	8.9	9.5	9.4	8.7	8.4	8.2f	7.6	7.3f	7.3
3	p5.0f	p4.5f	4.6f	4.0	3.6	3.2f	5.8	7.5	8.6	8.5	7.5	7.0	7.0	7.3	7.8	8.3	8.9	9.5	10.0	8.1	8.3f	p8.0f	p7.7f	5.8f	6.9
4	5.5f	4.6f	3.9f	3.7	3.4f	p4.0c	6.3	7.2	7.9	9.0	9.5	9.7	9.4	8.6	8.7	8.8	9.1	9.2	9.1	8.9	8.4	8.6	7.8	6.6	7.4
5	5.6	3.8f	p3.5f	...f	...f	...c	...c	...c	8.9c	9.0	8.8	8.8	9.3c	p9.5c	9.9	9.9	9.7	10.0	11.2	10.8	9.7c	p9.2c	p8.5c	8.3c	...
6	p6.0c	6.2c	p5.2f	p4.3f	p3.2f	2.3c	p5.8c	p7.0c	9.0c	9.8	9.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	p5.3c	...
7	5.4c	4.7c	4.5c	4.2c	3.8c	5.6c	8.1c	9.4c	9.1c	...c	...c	...c	...c	...c	...c	p11.4c	10.8	10.5	10.5	10.0	9.7	p8.9f	8.1f	8.2	...
8	7.2	5.3	4.1	3.7	2.9	3.3	5.8	p7.0c	p8.0c	9.2	8.9	8.9	8.4	8.6	8.6	9.1	9.2	9.6	9.9	8.8	8.5c	p7.9c	p7.3c	p6.7c	7.4
9	p6.1c	p5.4c	p4.7c	p4.1c	3.5c	3.2c	5.6c	...c	...c	...c	...c	...c	...c	...c	10.2c	10.7	10.9	10.4	10.7	9.9	9.7	10.0	8.9	8.3	...
10	6.2	5.1	4.0	3.4	3.3f	2.8	5.3	6.9	7.9	7.2	7.2	7.3	7.2	7.4	7.6	8.1	8.5	8.8	10.0	8.7	7.9	7.6	6.8	6.9	6.8
11	6.6	4.9	4.4	3.9f	3.7f	p3.0f	5.4	6.9	7.6	7.2	7.2	7.5	7.8	7.4	7.4	7.7	8.4	9.0	9.5	8.8	8.0	7.4	7.3	6.7	6.8
12	5.4	4.4	3.3	2.8	2.7	2.8	5.5	7.5	8.4	9.1	9.2	8.0	7.8	8.0	8.2	8.3	8.2	8.8	9.4	8.6	8.3f	8.5f	p6.5f	p6.0f	6.9
13	4.1f	3.8f	p3.2f	p2.8f	p2.6f	1.9f	5.5	6.8	7.8	8.4	7.7	7.5	7.3	7.8	8.4	8.6	8.8	9.6	9.5	8.7	7.4	6.7f	6.4	5.4	6.5
14	4.9	2.9a	2.5	2.5	p2.4a	2.4	5.5	7.3	7.9	8.5	7.3	7.1	7.2	7.5	7.5	7.8	7.8	8.2	8.5	7.8	8.1	8.2f	5.8	5.3	6.3
15	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.5	7.4	6.9	6.5	6.4	6.6	7.1	7.4	7.8a	8.4	7.5	7.4	5.8	5.2	4.9	...
16	4.5	3.6	2.4	2.0b	p1.9b	1.8b	5.2	7.3	8.3	9.0	8.8	8.4	8.4	9.0	9.1	8.5	8.8	9.1	10.1	10.1	9.4	8.3	7.1	7.2	7.0
17	7.0	5.8	5.0	4.2	3.5	3.2	5.9	6.6	7.4	7.7	8.7	9.2	9.3	8.0	7.7	p7.8c	p7.5c	7.8	8.0	7.9	7.4	p6.8c	p6.1c	p5.4c	6.8
18	4.8	3.6	3.4f	p3.2f	3.3f	3.1	5.4	6.1	6.7	7.7	7.8	8.8	9.2	9.0	9.3	9.6	8.9	8.7	8.7	8.6	8.1	7.1	6.6	5.8c	6.8
19	4.5	4.5	4.4	4.4	p2.9b	2.7	5.6c	6.0	6.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.9	...c	...c	...c	...c	...c	...
20	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.6	9.8	10.1	11.0	10.9	10.3	10.1	9.9	10.4	p9.0f	8.5f	7.0f	p6.3f	...
21	5.6f	4.0f	3.2	2.2	2.2f	2.2	5.5	7.2	7.9	8.7	9.3	8.7	9.0	8.8	9.5	10.2	9.9	9.2	9.5	9.5	8.9	8.9	9.8c	p8.6c	7.4
22	p7.4f	p6.2f	5.0	3.9c	p3.5c	p3.1c	p6.0c	p7.8c	p8.3c	8.8	9.6	9.9	p10.3c	10.0	8.9	9.4	8.5	p7.4c	7.5	p7.2c	p6.9c	...f	...f	...f	...
23	...f	...f	...f	...f	...f	...f	6.4	8.2	8.9	10.0	p10.4c	10.3	p10.8c	11.4	11.3	p11.4c	11.2	10.2	8.2	7.6	8.6	7.5	6.0	6.3	...
24	p6.3f	p5.4f	4.4f	3.8f	3.8	3.8	6.3	8.1	9.1	9.3	9.6	9.3	10.4	10.4	11.0	10.3	8.4	8.3	7.5	7.1	6.6	5.5	5.5	4.9f	7.3
25	3.8f	p3.7f	p3.5f	3.4f	p3.1f	2.9f	6.0	7.2	7.9	8.8	9.9	10.3	10.6	11.3	11.5	11.9	11.8	11.6	11.5	11.2	9.4	7.9	6.7	5.3	8.0
26	4.1	3.6f	3.3f	2.6	2.0	2.3	5.9	8.1	9.3	9.4	8.8	8.8	10.2	10.8	10.7	10.6	10.1	8.9	7.7	7.9	7.5	6.7	7.4	p6.7f	7.2
27	p6.0f	5.3f	p4.7f	p4.1f	p3.5f	2.9f	6.2	8.0	8.3	8.3	8.1	8.5	8.7	9.4	9.7	10.5	10.6	10.5	10.3	10.1	9.8	9.6	8.7	8.5	7.9
28	7.3	5.7	5.3	4.5	2.4	2.6	5.8	8.0	p8.9c	9.4	7.9	7.9	8.3	9.4	p10.3c	10.7	p10.4c	9.4	8.3	6.8	6.6	5.0	4.3	2.7	7.0
29	p2.5b	p2.4b	p2.3f	2.1f	2.1f	2.5	6.2	8.2	9.3	p8.7c	8.4	8.0	8.4	9.3	9.9	10.3	10.8	10.8	10.7	9.5	7.4	6.8	6.5	5.3	7.0
30	4.4f	p4.0f	p3.6f	p3.2f	p2.8f	2.5	6.0	8.4	9.3	9.4	9.1	p8.8c	8.6	9.0	9.6	10.2	10.5	11.0	11.0	10.1	9.7	p8.7c	7.7	p6.5c	7.7
31																									
MEAN*	5.6	4.6	4.0	3.5	3.1	3.0	5.9	7.5	8.3	8.8	8.6	8.5	8.7	8.8	9.1	9.4	9.4	9.4	9.4	8.9	8.3	7.8	7.1	6.4	7.2

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 284

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1943 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS NOVEMBER 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	240	230	250	235	240	240	q245c	270	285	q300c	q330c	q350c	340	340	320	310	290	270	250	280	290	330	300	320	286
2	270	240	250	270	260	260	250	270	300	315	330	360	350	360	360	300	300	250	250	290	280	220	280	290	288
3	310	300	260	250	230	240	250	280	320	330	360	350	360	365	350	290	280	270	240	280	300	250	270	300	293
4	290	260	270	260	250	q240c	240	260	280	310	320	330	340	340	330	320	320	230	250	280	290	240	290	280	284
5	290	340	390	380	400	q260c	q240c	q270c	q280c	340	320	q350c	330	q320c	310	325	280	230	220	240	240	260	230	270	296
6	260	320	340	380	360	280	240	270	300	310	310	q330c	q330c	q325c	q315c	q315c	q285c	250	250	260	280	260	q280c	q260c	296
7	q280c	q290c	q260c	q240c	q210c	q250c	240	270	q300c	300	q320c	q335c	q330c	q330c	q320c	q300c	290	270	240	280	310	300	260	230	281
8	245	240	250	240	230	230	q220c	q260c	q300c	320	330	340	320	320	310	290	270	280	240	270	270	280	230	280	274
9	230	240	240	240	270	270	q230c	q270c	q310c	q325c	q340c	q345c	q335c	q325c	300	290	300	260	240	250	240	210	220	220	271
10	220	250	290	300	280	280	230	280	320	330	350	350	350	330	350	330	290	270	220	240	250	270	270	270	288
11	250	250	270	290	300	280	230	280	320	330	340	340	330	320	330	320	330	260	240	250	250	250	260	250	286
12	240	230	240	270	260	270	230	260	290	310	335	360	340	340	330	310	300	270	230	260	280	290	370a	305	288
13	290	310	240	240	270	280	230	290	310	330	360	350	350	340	320	310	300	240	240	240	250	240	270	290	291
14	290	280a	300	340	220	280	260	280	325	350	340	370	350	350	330	310	290	240	240	240	250	250	280	280	294
15	270	270	250	270	270	250	240	q280c	q300c	335	360	370	400	400	370	340	300	310	240	260	250	230	250	270	295
16	260	310	360	400b	q345b	290b	240	280	300	320	360	370	390	330	325	290	280	260	240	240	250	230	230	240	298
17	240	240	250	250	270	280	240	270	280	310	330	350	370	340	350	330	315	240	260	280	290	280	280	310	290
18	310	320	300	350	320	290	240	250	280	290	300	340	340	370	355	300	300	285	250	270	240	240	250	320	296
19	260	270	280	260	q270b	290	230	250	270	...c	...c	...c	...c	...c	...c	...c	...c	270	260	...c	...c	...c	...c	...c	...
20	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	305	310	330	325	290	290	270	240	250	260	400	360	320	...
21	300	200	190	240	280	270	240	280	315	305	320	330	340	350	320	300	300	270	260	270	230	250	320	q370c	285
22	430	500	510	530	q280c	q270c	q240c	q270c	q305c	320	300	340	340	330	300	320	325	q250c	260	q290c	q300c	340	350	370	336
23	380	330	350	290	270	270	240	260	280	280	310	320	320	320	320	q310c	290	240	260	250	255	260	280	320	292
24	305	310	320	270	230	260	240	260	290	330	320	290	300	315	350	320	300	290	260	270	270	300	320	300	292
25	340	380	420	400	330	270	230	260	280	300	325	q320a	320	q320a	320	300	q275a	250	250	270	260	250	290	350	305
26	340	370	350	320	340	280	250	275	300	310	350	310	300	315	320	325	315	280	240	270	290	280	280	250	302
27	260	320	300	300	280	280	260	270	320	300	360	320	310	330	340	310	290	275	260	255	250	250	250	240	289
28	250	260	270	230	230	270	270	245	260	290	310	350	350	325	310	300	280	270	260	240	230	240	300	360	279
29	q410b	460b	430b	350b	300b	260	240	280	300	290	350	378	350	340	300	320	280	270	240	240	240	250	280	320	312
30	350	370	340	370	330	260	240	270	230	330	360	q350c	340	325	320	310	300	270	260	250	250a	240	260	270	300
31																									
MEAN*	290	300	302	302	280	267	241	269	295	315	334	341	339	336	328	310	295	266	246	261	264	265	280	292	292

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 285

NOVEMBER 1943 | NOVEMBER 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.2	4.3	p4.5c	p4.5c	p4.6c	4.6	4.5	4.5	4.4	4.1	3.9	...
2	...	4.2	4.6	4.5	4.5	4.7	4.5	4.5	4.6	4.4	4.3	...	...
3	...	4.2	4.5	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3a	4.0	...
4	...	4.3	4.5	4.5	4.5	4.5	4.6	4.5	4.5	4.4	4.5	...	...
5	...	p4.3c	p4.5c	4.5	p4.3c	p4.5c	p4.6c	p4.5c	4.3	4.3	4.2	...	...
6	...	p4.2c	p4.5c	4.4	...c	...c	...c	...c	...c	...c	p4.3c	...	...
7	...	p4.0c	p4.4c	p4.5c	...c	...c	...c	...c	...c	p4.4c	4.3	...	...
8	...	p4.1c	p4.4c	4.5	4.5	4.5	4.5	4.4	4.4	4.3	4.2	4.2	...
9	...	...c	...c	...c	...c	...c	...c	...c	p4.5c	4.3	4.3	4.0	...
10	...	4.1	4.3	4.3	4.5	4.5	4.5	4.5	4.5	4.3	4.4	3.9	...
11	...	4.3	4.4	4.3	4.4	4.5	4.5	4.5	4.4	4.3	4.3	...	...
12	...	4.2	4.3	4.3	4.3	4.5	4.4	4.4	4.4	4.5	4.3	3.9	...
13	...	4.2	4.3	4.3	4.5	4.4	4.3	4.3	4.2	4.3	4.2	...	...
14	...	4.2	4.3	4.4	4.4	4.4	4.4	4.3	4.3	4.1	4.1	...	...
15	...	p4.3c	p4.4c	4.5	4.5	4.4	4.4	4.3	4.3	4.5	4.1	...	...
16	...	4.4	4.5	4.3	4.5	4.6	4.5	4.4	4.3	4.1	4.1	3.9	...
17	...	4.2	4.3	4.5	4.5	4.5	4.5	4.4	4.4	4.2	4.2	...	...
18	...	4.0	4.1	4.4	4.5	4.5	4.6	4.5	4.4	4.5	4.3	3.9	...
19	...	4.1	4.3	...c	...c	...c	...c	...c	...c	...c	...c	4.0	...
20	...	p4.1c	p4.4c	p4.5c	p4.6c	4.6	4.6	4.6	4.5	4.4	4.1	3.9	...
21	...	4.1	4.5	4.5	4.6	4.6	4.7	4.7	4.5	4.2	4.1	4.0	...
22	...	p4.2c	p4.5c	4.5	4.5	4.6	4.6	4.5	4.2	4.5	4.2	...	...
23	...	4.2	4.5	4.4	4.5	4.6	4.5	4.5	4.7	p4.5c	4.2	...	...
24	...	4.0	4.5	4.5	4.6	4.6	4.5	4.6	4.5	4.5	4.3	4.0	...
25	...	4.1	4.5	4.6	4.5	p4.6a	4.6	p4.6a	4.5	4.5a	p4.2a	...	...
26	...	4.1	4.5	4.5	4.6	4.6	4.5	4.6	4.4	4.6	4.3	3.9	...
27	...	4.1	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.4	4.4	4.0	...
28	...	4.1	4.4	4.4	4.6	4.7	4.5	4.5	4.6	4.5	4.3	3.9	...
29	...	4.1	4.5	4.5	4.8	4.7	4.7	4.7	4.5	4.5	4.1	4.0	...
30	...	4.3	4.6	4.6	4.7	p4.7c	4.7	4.6	4.7	4.6	4.3	3.9	...
31													
MEAN*	...	4.2	4.4	4.4	4.5	4.6	4.5	4.5	4.4	4.4	4.2	4.0	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	220	p210c	p205c	p200c	200	210	210	210	220	230	...
2	...	230	220	210	210	200	210	200	200	200	200	...	...
3	...	225	220	220	210	210	190	200	200	205	220	235	...
4	...	220	210	220	210	200	200	200	190	190	210	...	...
5	...	p225c	p215c	210	210	200	200	p210c	200	210	230	...	...
6	...	230	220	220	...c	...c	...c	...c	...c	p200c	p220c	...	...
7	...	230	200	220	...c	...c	...c	...c	...c	p210c	p220c	...	...
8	...	p225c	p210c	205	205	200	190	200	200	190	220	240	...
9	...	...c	...c	...c	...c	...c	...c	...c	205	180	240	240	...
10	...	210	200	205	205	200	190	200	200	205	220	230	...
11	...	210	210	210	200	190	190	190	200	210	250	...	...
12	...	220	205	200	200	190	200	200	190	230	230	...	...
13	...	210	200	200	200	190	190	190	p200a	p200a	240	...	...
14	235	230	215	210	210	200	190	190	190	190	190	...	...
15	...	p225c	p215c	205	200	200	200	200	200	250	250	...	...
16	...	220	210	220	210	200	200	205	200	200	220	240	...
17	...	225	200	200	200	200	200	210	200	200	190	...	...
18	...	230	225	p210c	200	210	200	205	200	200	190	250	...
19	...	240	220	...c	...c	...c	...c	...c	...c	...c	...c	250	...
20	...	...c	...c	...c	...c	...a	190	p200c	210	215	215	245	...
21	...	230	215	210	200	200	200	210	220	210	200	230	...
22	...	p230c	p215c	205	200	210	200	200	210	200	200	...	...
23	...	225	220	200	200	200	200	205	200	p200c	200	230	...
24	...	220	225	210	210	205	200	200	220	210	210	240	...
25	...	220	220	220	200	...c	...c	...c	...c	...c	...a	...	...
26	...	230	200	220	210	210	210	p210c	220	250	225	250	...
27	...	230	225	215	210	210	220	210	205	205	230	245	...
28	...	230	200	200	200	205	210	200	200	230	230	240	...
29	...	230	215	200	200	200	200	210	200	205	210	235	...
30	...	235	230	200	190	p190c	200	200	200	225	235	240	...
31													
MEAN*	235	226	214	209	204	201	199	202	203	207	218	239	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 286

NOVEMBER 1943 — **IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY** — NOVEMBER 1943

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	p1.0c	p1.2c	p1.6c	p1.8c	p2.0c	p2.0c	2.0	2.0	1.8	1.8	1.4	1.2	1.0
2	1.0	1.3	1.7	1.8	2.0	2.0	1.8	1.9	1.8	1.6	1.3	1.2	1.1
3	1.2	1.2	1.3	1.7	1.8	2.0	1.6	1.8	1.4	1.3	1.3	0.9	0.9
4	1.2	1.2	1.4	1.8	1.7	1.7	1.8	1.8	1.8	1.4	1.2	1.2	0.6
5	p1.2c	p1.2c	p1.4c	1.7	1.7	p1.8c	1.9	p2.0c	1.9	1.7	1.4	p1.2c	p0.9c
6	p1.2c	1.2	p1.4c	p1.6c	p1.8c	p2.1c	p1.9c	p1.7c	p1.6c	p1.4c	p1.4c	p1.1c	p0.8c
7	p1.2c	1.2	p1.3c	...c	...c	...c	...c	...c	...c	...c	...c	0.9	0.6
8	p1.2c	p1.3c	p1.4c	p1.4c	p1.4c	1.8	1.8	1.8	1.4	1.2	1.1	1.0	0.8
9	...c	...c	...c	...c	...c	...c	...c	...c	1.8	1.7	1.4	1.4	1.2
10	1.2	1.3	1.6	1.8	1.8	1.7	1.8	2.2	2.2	1.7	2.0	1.6	1.2
11	1.0	1.2	1.6	1.8	2.0	2.2	2.1	2.2	2.2	2.1	1.8	1.6	1.2
12	1.2	1.5	1.7	2.0	2.1	2.0	2.1	2.0	2.0	1.9	1.6	1.3	1.2
13	1.2	1.2	1.8	1.8	2.0	1.8	1.8	1.8	1.7	1.4	1.4	1.2	1.0
14	1.2	1.7	1.4	1.7	1.9	1.8	2.0	1.9	1.7	1.5	1.4	1.2	0.7
15	p1.2c	p1.6c	p1.7c	1.8	1.8	1.8	1.8	1.7	1.8	1.7	1.5	1.4	0.9
16	1.3	1.4	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.3	1.2	1.2
17	1.4	1.6	2.1	1.9	2.2	2.0	2.0	1.9	1.8	1.7	1.4	0.8	0.8
18	1.7	2.0	1.8	p1.9c	p1.9c	2.0	2.2	2.8	1.8	1.8	1.4	1.2	0.9
19	1.0	1.6	2.2	...c	...c	...c	...c	...c	...c	...c	...c	1.5	0.9
20	...c	...c	...c	...c	...c	...c	...c	2.2	2.2	1.7	1.4	1.0	0.9
21	0.8	1.4	1.6	2.1	2.0	2.1	2.1	2.3	1.8	2.0	1.7	0.9	0.9
22	p0.9c	p1.3c	p1.4c	1.7	2.2	1.8	1.9	1.9	1.8	1.8	1.4	p0.8c	0.8
23	1.0	1.2	1.2	1.7	p1.8c	p1.8c	1.9	p1.9c	1.8	p1.7c	1.5	1.4	0.8
24	0.9	1.0	1.7	1.8	2.1	2.7	2.7	p2.2c	2.1	1.7	1.4	1.4	1.2
25	0.9	1.7	1.7	1.8	1.8	2.3	2.1	2.4	1.7	1.9	1.4	1.4	1.0
26	1.0	1.2	1.4	1.8	1.8	p2.8c	2.4	2.7	1.9	1.7	1.4	1.2	1.0
27	1.0	1.2	1.4	1.8	1.8	1.8	2.0	2.0	1.8	1.4	1.6	1.2	1.0
28	1.0	1.2	1.4	1.6	1.8	2.0	1.8	2.0	2.1	1.9	1.8	1.7	1.0
29	1.3	1.5	1.8	1.8	1.7	2.0	2.2	2.0	2.0	1.7	1.7	1.2	1.0
30	1.0	1.2	1.4	1.8	1.8	1.9	2.0	2.0	1.9	2.1	1.4	1.2	0.8
31													
* MEAN	1.1	1.4	1.6	1.8	1.9	2.0	2.0	2.0	1.8	1.7	1.5	1.2	0.9

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	p2.1c	p2.7c	p3.2c	p3.2c	p3.3c	p3.4c	3.4	3.4	3.3	3.0	2.6	2.2	1.3
2	2.1	2.6	3.0	3.2	3.4	3.5	3.4	3.4	3.3	3.0	3.0	2.2	1.8
3	2.1	2.7	2.8	3.3	3.4	3.5	3.6	3.6	3.4	3.0	3.1	2.2	1.3
4	2.1	2.7	3.0	3.3	3.3	3.5	3.4	3.4	3.3	3.1	2.9	2.2	1.2
5	p2.1c	p2.5c	p2.9c	3.4	p3.0c	p3.3c	p3.4c	p3.2c	3.2	3.1	2.8	p2.2c	p1.2c
6	p2.1c	p2.3c	p2.8c	3.4	p3.1c	p3.3c	p3.5c	p3.5c	p3.1c	p2.9c	p2.1c	p2.0c	p1.2c
7	p1.9c	p2.3c	p2.6c	p2.9c	p3.2c	p3.4c	p3.6c	p3.6c	p3.4c	p3.2c	p2.3c	p1.9c	p1.2c
8	p1.7c	p2.3c	p2.9c	3.3	3.4	3.5	3.6	3.6	3.5	2.7	2.6	2.1	1.0
9	...c	...c	...c	...c	...c	...c	...c	...c	3.5	2.9	2.8	2.2	1.7
10	1.8	2.6	3.0	3.2	3.4	3.4	3.5	p3.4c	3.3	3.2	2.9	2.4	2.0
11	2.0	2.6	3.2	3.4	3.5	3.4	3.7	3.6	3.5	3.4	p3.3c	2.5	2.0
12	2.0	2.6	2.9	3.4	3.5	3.6	3.7	3.5	3.3	3.1	2.7	2.3	1.8
13	2.2	2.1	3.1	3.4	3.4	3.5	3.6	3.4	3.3	3.6	2.9	3.0	1.3
14	2.0	2.7	3.0	3.3	3.5	3.5	3.6	3.5	3.3	2.9	2.7	2.2	1.2
15	p2.0c	p2.7c	p3.0c	3.4	3.5	3.5	3.5	3.5	3.4	3.0	3.0	3.0	1.8
16	1.9	2.7	3.0	3.2	3.5	3.5	3.5	3.4	3.4	3.1	3.1	2.3	1.3
17	2.1	2.6	3.1	3.3	3.5	3.5	3.5	3.5	3.4	2.9	2.0	2.3	1.6
18	2.1	2.8	3.0	p3.4c	3.7	3.6	3.7	3.5	3.4	3.2	2.9	2.4	1.3
19	2.0	2.7	3.0	...c	...c	...c	...c	...c	...c	...c	...c	2.0	1.2
20	...c	...c	...c	...c	...c	...c	3.8	3.7	3.4	3.0	2.8	2.2	1.3
21	2.3	2.4	3.1	3.4	3.6	3.6	3.5	3.5	3.5	3.3	3.6	2.4	1.0
22	p2.2c	p2.4c	p3.1c	3.2	3.5	3.5	3.5	3.4	3.2	3.0	2.7	p2.2c	0.8
23	2.2	2.5	3.0	3.1	3.5	3.6	3.6	3.3	3.2	p3.0c	2.8	2.2	1.4
24	2.0	2.6	3.2	3.2	3.7	3.7	3.5	3.6	3.6	3.5	2.8	2.4	1.4
25	2.2	2.9	3.0	3.6	3.4	p3.5c	p3.6c	p3.6c	p3.7c	p3.5c	p2.8c	2.2	1.4
26	2.1	2.7	3.0	3.4	3.5	3.6	3.4	p3.5c	3.6	3.0	2.7	2.2	1.7
27	2.1	2.8	3.0	3.2	3.4	3.5	3.6	3.4	3.3	3.1	2.7	2.2	1.3
28	2.0	2.6	3.0	3.3	p3.4c	p3.5c	3.6	3.5	3.6	3.0	2.8	2.3	1.3
29	2.1	2.7	3.0	3.3	3.5	3.6	3.4	3.4	3.3	3.1	3.1	2.4	1.3
30	2.3	3.4	3.4	3.4	3.5	3.6	3.6	3.6	3.4	3.3	3.0	2.4	1.6
31													
* MEAN	2.1	2.6	3.0	3.3	3.4	3.5	3.5	3.5	3.4	3.1	2.8	2.3	1.4

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f°F2 EQUAL TO OR LESS THAN f°F1   h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 287

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1943 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — DECEMBER 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	4.7	3.3	3.0	2.7	1.9b	2.8	p5.8c	8.0	9.1	8.5	7.2	6.9	7.1	7.6	8.4	8.8	9.2c	9.0c	p9.2c	8.8c	7.4	6.5	5.9	5.0	6.5
2	4.1	3.5	3.2	p3.0f	p2.8f	2.6	6.3	7.6	8.1	9.2	8.7	7.0	7.3	8.2	10.3	10.3	10.4	10.3	10.2	p9.2c	p9.6c	8.1	6.9	6.0f	7.2
3	5.5	4.4	3.9	p3.4f	p3.0f	2.5	5.7	7.5	8.7	8.8	8.7	8.0	7.5	7.3	8.4	8.9	8.9	8.8	9.2	8.5	8.0	7.7	7.4	6.2	7.0
4	4.9	3.4f	p3.2f	p3.0f	p2.7a	2.5	5.6	7.2	8.2	8.9	9.5	9.7	9.5	9.4	9.9	9.7	9.8	9.9	9.5	9.1	8.3	6.8	5.9	4.5f	7.1
5	4.0f	p3.8f	p3.6f	p3.2f	p2.9f	2.6	5.9	7.3	7.9	8.2	9.4	9.9	10.1	10.1	10.5	10.3	99.8	9.9	10.0	9.1	7.2	p6.2f	p5.2f	4.2f	7.1
6	4.0f	4.0f	p3.6f	p3.2f	p2.9f	2.5f	5.3	6.5	7.5	8.2	9.0	9.8	9.8	9.7	10.1	10.5	10.1	9.4	9.3	8.1	6.7	5.4f	4.8f	4.6f	6.9
7	4.3f	4.2f	4.1f	3.7f	3.3	2.9	5.6	7.1	7.2	8.2	9.3	10.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
8	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.8	9.6	9.8	9.8	10.5	11.2	11.9	11.1	10.8	10.2	9.0	7.8	7.2f	6.7f	p5.8f	...
9	p4.8f	p3.9f	p3.5f	p3.1a	p2.7a	2.3f	5.4	6.9	8.2	8.4	8.8	8.8	9.2	10.5	11.1	10.6	10.2	9.8	9.3	9.2	8.6	6.8	6.4f	6.5	7.3
10	5.5	4.4	p3.9f	p3.3f	p2.8f	2.3f	5.4	7.2	8.0	8.3	8.3	8.7	9.8	10.1	10.4	10.5	10.2	9.5	9.3	p6.7c	7.2	6.2	5.1	5.1	7.1
11	4.3f	3.4f	2.9	2.2	2.1f	2.2f	4.9	6.4	6.8	6.8	6.7	6.7	7.2	8.0	8.8	p9.1c	8.8	8.5	8.4	7.5	6.7	5.9	4.9	4.2	6.0
12	3.1	2.9	2.9	p2.5f	p2.3f	2.2f	5.2	6.6	7.4	7.2	6.8	7.0	7.3	7.8	8.6	9.0	8.8	8.1	7.8	7.3	6.1	5.4f	4.9f	4.8f	5.9
13	p4.6f	4.4	3.4	2.9	p2.6f	p2.0f	p4.9	p6.6	p6.9	p7.2	p7.1	p7.0	p7.9	p8.2	p8.6	p8.5	p8.5	p7.6	p7.2	p7.3	p6.8	p5.6f	p5.5f	p5.0f	6.1
14	p4.5f	p4.0f	p3.6f	3.2f	p2.6f	2.0f	5.5	6.6	6.9	6.3	6.0	7.0	8.0	9.2	8.7	7.8	7.4	7.2	6.6	6.4	6.4	5.6f	6.2f	4.4	5.9
15	2.8	1.8	1.5	1.5	p1.5c	p1.5c	p5.5c	p7.2c	p7.9c	8.2	8.0	6.6	6.3	6.9	7.7	8.4	8.8	8.4	8.1	7.3	7.4	6.7	5.9	4.4	5.8
16	3.0	2.3	2.5f	2.4f	p2.4a	2.4	5.2	6.7	7.9	7.2	7.3	7.9	8.6	8.3	8.0	8.2	9.0	8.7	8.6	8.6	8.6	7.9	6.4	5.5	6.4
17	4.7	4.2f	4.2f	p3.7f	p3.2f	p2.8f	5.0	7.4	8.5	9.0	9.1	9.0	7.6	7.3	7.8	8.6	9.1	9.6	9.5	8.7	7.0f	6.6f	p5.6f	4.5f	6.8
18	4.2f	4.2f	4.0	3.5	2.7	2.8	5.5	6.9	7.9	8.2	7.0	6.8	6.9	7.5	8.3	8.8	8.4	8.3	8.0	6.9	5.5	4.8	4.6f	4.4	6.1
19	3.9	3.6f	3.9	3.5	3.2f	3.6	5.3	7.0	8.2	8.5	7.8	7.5	7.3	7.1	7.8	8.6	9.2	9.1	9.3	8.5	8.0	7.2	5.6	4.5	6.6
20	3.8	p3.4f	p3.0f	p2.7f	p2.4f	2.1	5.3	7.0	p8.2c	8.3	7.5	7.6	6.9	6.9	8.0	8.3	8.5	8.8	9.3	8.3	7.2	5.6f	4.8f	4.7f	6.2
21	4.5f	4.2f	3.8f	p3.4f	p2.9f	2.5f	5.4	7.4	8.5	8.8	9.3	8.7	8.6	9.2	9.3	9.1	9.0	8.5	8.8	8.6	7.8	7.2	5.5	5.4	6.9
22	4.0f	p3.8f	3.6f	p3.2f	2.7	2.4	5.3	7.7	8.5	8.4	8.2	8.0	7.6	8.3	8.4	8.6	9.0	8.4	8.0	6.8	6.0	6.9	6.9	5.5	6.5
23	5.4	4.7	4.7	4.3	2.1	2.3	5.9	7.9	8.4	9.0	9.3	9.6	9.2	9.2	9.8	9.2	p8.9c	8.6	p8.7c	8.0	6.9	5.5f	4.2f	p3.9f	6.9
24	p3.6f	3.2f	3.3f	p3.0f	p2.7f	2.3f	5.3	7.0	8.1	7.9	7.0	7.8	8.7	9.5	9.3	10.1	10.2	9.9	9.6	8.4	6.7	5.5f	5.5f	6.2	6.7
25	5.8	4.8	4.8	4.4f	3.7f	3.6	6.3	8.2	9.5	9.5	9.2	8.7	9.0	9.4	9.6	10.2	10.2	9.8	9.4	8.3	6.6	5.5f	5.4f	5.5	7.4
26	5.5	4.9	3.6	3.2	2.7	2.5	5.3	7.5	8.6	8.9	8.6	8.5	7.8	7.9	8.2	p8.3c	p8.4c	p8.5c	p8.6c	8.7	7.5	6.4	5.8f	5.7f	6.7
27	p5.3f	p4.9f	p4.5f	p4.1f	p3.8f	3.5	5.8f	7.7	8.6	9.1	9.5	8.4	9.0	9.0	9.1	9.3	9.4	9.5	9.9	6.3	7.6	4.8	4.2	3.6	7.0
28	2.7	1.8	1.5f	p1.4f	p1.6f	1.8f	4.8	6.7	7.8	8.0	7.9	7.2	7.1	7.4	8.5	9.0	9.4	9.2	9.2	8.3	7.3	5.6	4.9	p4.2f	6.0
29	p3.5f	p2.9f	2.3f	p2.2f	p2.1f	2.0f	5.5	7.3	7.6	7.2	6.3	6.1	6.3	7.7	9.0	9.6	9.1	8.5	8.3	7.9	5.8	4.3	3.2	3.5f	5.8
30	3.3f	2.6b	2.0b	1.9b	1.5b	1.8	5.2	7.1	7.3	7.3	6.3	7.0	6.8	7.2	8.1	8.7	8.7	8.4	9.0	8.1	6.5	5.1f	5.0f	4.8f	5.8
31	4.7f	p4.3f	4.0f	3.2	p2.4b	1.6b	5.0	6.7	7.7	7.7	6.8	7.0	7.4	7.9	8.9	10.2	9.2	8.9	8.8	8.4	8.1	6.1	4.3	3.9	6.4
MEAN*	4.3	3.7	3.4	3.0	2.6	2.4	5.4	7.2	8.0	8.2	8.1	8.0	8.0	8.4	9.0	9.3	9.3	9.0	8.9	8.2	7.2	6.2	5.4	4.9	6.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 288

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1943 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — DECEMBER 1943

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	290	300	290	265	250b	260	260	270	290	320	380	340	350	340	320	290	290	280	250	260	260	290	290	280	292
2	270	290	280	300	370	280	230	255	300	330	360	360	335	360	320	310	320	240	260	270	270	290	280	250	297
3	220	240	280	280	290	270	240	280	290	330	340	370	370	410	340	320	320	230	270	270	250	240	250	280	291
4	320	360	380	300	290	280	240	275	300	330	340	330	340	350	360	320	300	240	250	270	280	320	320	340	310
5	330	330	350	370	370a	280	240	260	290	315	290	305	330	320	320	330	320	240	250	290	340	380	370	340	315
6	250	240	270	240f	280f	280	260	280	300	320	325	330	340	335	330	320	320	300	250	250	280	340	360	320	297
7	280	250	220	230	230	240	250	260	300	280	300	320	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
8	...c	...c	...c	...c	...c	...c	...c	...c	...c	330	330	340	360	340	310	310	330	240	270	260	260	290	320	310	...
9	320	390	380	370	370	280	240	280	300	340	340	330	340	315	300	310	310	240	240	240	240	300	300	310	308
10	320	320	350	380	350	290	240	280	310	330	320	320	310	315	320	310	300	280	240	230	240	240	270	250	296
11	250	260	250	240	250	265	230	290	330	380	370	380	370	320	315	q300c	290	290	250	260	270	280	300	340	295
12	290	280	250	q240a	240	230	240	300	320	370	380	360	340	340	315	290	290	280	260	280	320	340	310	280	298
13	260	240	250	250	300	290	300	280	310	350	380	370	340	340	310	300	300	290	270	260	280	330	385	405	308
14	430	410	340	280	270	270	230	300	350	400	430	330	320	290	280	300	330	280	260	230	240	230	240	250	304
15	240	250	280	270	q285c	q300c	q315c	q330c	q350c	370	420	420	400	390	360	335	300	270	240	240	230	230	250	260	306
16	250	270	330	330	250	280	220	255	275	380	400	360	350	390	335	350	320	300	260	200	240	250	250	300	298
17	310	290	280	370	360	q280f	230	260	290	310	380	390	370	360	350	330	310	270	260	300	310	330	380	350	320
18	320	280	230	230	230	270	240	270	310	350	370	370	400	380	340	350	340	310	260	280	330	320	320	260	307
19	260	270	230	240	230	220	230	280	325	335	350	380	380	380	360	300	320	300	250	240	270	290	330	330	296
20	360	350	350	330	305	280	240	270	q300c	340	380	370	390	390	350	360	315	280	260	280	320	350	360	330	328
21	310	295	310	280	260	290	240	280	290	335	350	350	350	350	350	330	320	290	270	250	290	330	340	340	308
22	360	320	290	270	220	260	240	280	300	340	350	350	350	370	350	310	305	340	250	260	270	270	280	260	300
23	260	260	270	210	240	240	240	260	280	300	310	290	300	290	280	275	q285c	300	260	280	320	380	380	390	288
24	330	280	270	280	240	260	240	280	325	350	370	380	350	330	340	330	310	300	260	280	330	330	300	270	306
25	230	250	270	270	260	250	250	280	310	325	350	350	340	350	330	330	320	235	260	280	320	370	310	240	295
26	230	230	240	270	230	270	250	275	300	330	350	335	360	355	370	q350f	q330f	q310f	q290f	270	250	340	350	360	302
27	350	360	340	270	270	280	240	290	310	335	360	350	360	340	350	335	315	280	260	260	250	280	270	240	304
28	230	240	260	260	300	310	250	300	300	340	360	375	450	400	340	320	330	300	260	240	280	380	380	380	316
29	360	370	410	350	340	250	230	280	340	360	410	415	405	360	325	300	300	280	250	260	260	320	330	290	325
30	250	260	260	250	270	280	230	270	330	390	400	400	400	400	360	340	340	345	270	300	330	380	370	330	323
31	350	310	280	230	280b	330b	240	300	340	370	380	400	380	380	340	300	300	300	270	280	280	310	320	310	316
MEAN*	294	293	293	282	281	272	244	279	308	341	360	357	359	353	332	318	313	282	258	262	280	311	317	306	304

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 289

DECEMBER 1943 DECEMBER 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.2	4.3	4.5	4.5	4.5	4.8	4.4	4.5	4.4	4.2	4.0	...
2	...	4.4	4.5	4.5	4.6	4.7	4.6	4.6	4.5	4.8	4.7	...	...
3	...	4.3	4.6	4.5	4.6	4.7	4.6	4.5	4.4	4.3	4.2	...	...
4	...	4.3	4.8	4.4	4.5	4.5	4.6	4.4	4.5	4.5	4.1	...	...
5	...	4.3	4.4	4.5	4.5	4.5	4.7	4.5	4.5	4.4	4.4	...	...
6	...	4.1	4.3	4.4	4.4	4.5	4.5	4.5	4.4	4.5	4.4	4.2	...
7	...	4.2	4.5	4.4	4.6	4.5	...c	...c	...c	...c	...c	...	...
8	...	...c	...c	4.5	4.6	4.7	4.6	4.5	4.4	p4.3a	4.4	...	...
9	...	4.2	4.5	4.7	4.6	4.5	4.5	4.5	4.4	4.5	4.3	...	...
10	...	4.2	4.3	4.5	4.5	4.5	4.5	4.4	4.5	4.5	4.3	3.9	...
11	...	4.2	4.5	4.4	4.4	4.4	4.5	4.4	4.4	4.4	4.3	4.1	...
12	...	4.3	4.2	4.4	4.4	4.4	4.4	4.4	4.5	4.3	4.3	4.2	...
13	...	4.2	4.4	4.4	4.5	4.5	4.4	4.4	4.3	4.3	4.4	4.2	...
14	...	4.3	4.3	4.5	4.4	4.4	4.4	4.5	4.4	4.3	4.4	4.1	...
15	...	p4.3c	p4.4c	4.5	4.4	4.5	4.4	4.4	4.4	4.4	4.3	4.2	...
16	...	4.0	4.3	4.8	4.5	4.5	4.5	4.7	4.4	4.6	4.4	4.0	...
17	...	4.3	4.5	4.5	4.7	4.7	4.6	4.6	4.5	4.5	4.4	4.0	...
18	...	4.0	4.5	4.5	4.5	4.5	4.6	4.5	4.5	4.5	4.5	4.1	...
19	...	4.2	4.4	4.4	4.6	4.6	4.6	4.5	4.5	4.3	4.4	4.2	...
20	...	4.1	p4.5c	4.5	4.6	4.5	4.4	4.6	4.6	4.7	4.4	4.2	...
21	...	4.1	4.3	4.5	4.5	4.6	4.5	4.6	4.5	4.6	4.5	4.2	...
22	...	4.2	4.4	4.4	4.6	4.5	4.5	4.8	4.6	4.3	4.5	...	...
23	...	4.2	4.5	4.8	4.7	4.7	4.7	4.6	4.5	4.6	p4.5c	4.4	...
24	...	4.2	4.5	4.6	4.7	4.7	4.7	4.5	4.4	4.5	4.3	4.3	...
25	...	4.2	4.5	4.5	4.5	4.5	4.6	4.6	4.5	4.4	4.3	...	...
26	...	4.5	4.5	4.7	4.6	4.5	4.5	4.5	4.6	p4.5c	p4.4c	p4.2c	...
27	...	4.5	4.5	4.6	4.6	4.6	4.6	4.5	4.5	4.6	4.4	4.0	...
28	...	4.3	4.5	4.5	4.5	4.5	4.8	4.6	4.5	4.3	4.5	4.1	...
29	...	4.2	4.5	4.4	4.5	4.5	4.6	4.5	4.6	4.3	4.4	4.0	...
30	...	4.1	4.3	4.3	4.4	4.5	4.5	4.4	4.4	4.4	4.3	4.1	...
31	...	4.1	4.4	4.4	4.4	4.6	4.6	4.6	4.5	4.5	4.4	4.3	...
MEAN*	...	4.2	4.4	4.5	4.5	4.5	4.6	4.5	4.5	4.4	4.4	4.1	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	235	225	215	205	190	180	185	190	200	200	200	240	...
2	...	210	210	205	200	200	195	190	200	220	220	...	...
3	...	210	200	200	190	190	200	190	200	215	220	...	...
4	...	230	220	220	200	200	200	200	200	200	200	...	...
5	...	220	220	215	200	200	p200a	p200a	200	200	220	...	...
6	235	220	215	205	210	200	200	200	200	p200a	200	210	...
7	220	215	200	205	195	215	...e	...c	...c	...c	...c	...	...
8	...	...c	...c	200	190	p195a	p195a	p200a	200	p200a	210	...	...
9	...	225	210	190	220	200	200	200	200	200	210	...	...
10	...	225	215	210	200	200	200	190	200	215	220	230	...
11	...	215	200	210	200	200	200	190	190	200	220	225	...
12	...	220	205	200	200	190	190	185	200	220	230	230	...
13	...	220	210	200	200	200	200	190	190	220	225	230	...
14	...	210	200	200	200	195	190	190	200	200	210	230	...
15	...	p210c	p200c	200	200	190	190	190	190	200	220	230	...
16	...	210	210	210	200	200	190	200	200	190	210	230	...
17	...	210	210	210	205	200	200	195	200	190	210	230	...
18	...	220	230	210	200	190	190	200	200	200	200	235	...
19	...	225	210	210	200	200	190	200	190	190	190	220	...
20	...	230	p210c	210	200	200	190	180	190	190	210	225	...
21	...	230	210	210	190	195	200	200	p200a	190	p230c	230	...
22	...	220	200	210	200	200	190	190	200	200	200	...	...
23	...	215	210	210	200	190	190	190	200	200	p215c	230	...
24	...	220	200	205	200	200	200	200	200	195	215	250	...
25	...	210	200	200	200	195	200	190	190	200	200	...	...
26	...	210	210	200	200	200	200	200	200	p200c	p215c	p230c	...
27	...	220	210	205	205	200	200	200	190	p200a	220	240	...
28	...	220	210	200	200	190	190	190	190	200	230	240	...
29	...	220	200	210	195	200	190	p200c	210	205	220	220	...
30	...	220	230	220	210	210	200	185	200	200	230	p250a	...
31	...	230	220	205	200	195	200	200	200	p210c	230	250	...
MEAN*	230	218	210	206	200	197	196	194	198	202	214	232	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 290

DECEMBER 1943

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1943

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.3	1.4	1.6	1.8	1.9	1.8	1.6	1.5	1.7	1.8	1.4	1.3	1.2
2	1.2	1.7	1.7	1.8	1.8	1.8	1.8	1.9	1.7	1.8	1.7	1.2	0.9
3	1.0	1.2	1.4	1.7	1.7	1.8	1.8	1.8	1.9	1.7	1.3	1.3	1.0
4	1.2	1.4	1.7	1.8	1.8	1.9	1.8	1.8	1.7	1.6	1.4	1.2	1.2
5	1.0	1.2	1.2	1.6	1.8	2.0	2.2	1.8	1.8	1.7	1.3	1.2	1.0
6	1.0	1.2	1.2	1.7	1.7	1.8	1.8	1.7	1.8	1.8	1.6	1.3	1.1
7	1.0	1.2	1.6	p1.7	1.8	2.0	...c	...c	...c	...c	...c	...c	...c
8	...c	...c	...c	1.7	1.7	1.8	1.8	2.0	2.3	1.8	1.3	1.2	0.9
9	0.7	1.0	1.2	1.8	1.7	1.8	1.8	1.7	1.7	1.6	1.8	0.8	0.8
10	0.8	0.8	0.9	1.6	1.8	2.0	2.1	2.0	1.9	1.9	1.8	1.8	1.2
11	0.8	0.8	1.0	1.3	1.7	1.7	1.7	2.0	2.0	1.7	1.8	1.5	0.9
12	0.8	0.8	0.8	1.5	1.7	1.8	2.0	2.0	2.2	2.1	1.7	1.3	1.3
13	0.7	0.6	0.6	1.4	1.7	1.8	1.7	2.0	1.8	1.7	1.7	1.6	0.9
14	0.8	0.8	0.8	1.6	1.8	2.0	1.8	1.8	1.9	1.8	1.8	0.9	0.8
15	p0.9c	p1.0c	p1.1c	1.8	1.9	1.7	1.9	2.2	1.9	1.8	1.7	1.7	1.2
16	1.2	1.2	1.7	1.7	1.8	1.9	1.8	1.9	1.8	1.8	1.4	1.2	0.9
17	1.3	1.4	1.8	1.8	1.9	1.9	1.8	2.0	1.8	1.7	1.7	1.5	1.3
18	1.0	1.2	1.3	1.7	1.8	1.9	1.9	1.9	1.8	1.8	1.6	1.0	0.9
19	1.0	1.2	1.2	2.0	1.8	1.8	1.8	1.6	1.8	1.8	1.6	1.6	1.4
20	0.9	1.2	p1.7c	1.8	1.8	1.8	1.9	1.8	1.8	1.6	1.6	1.0	1.0
21	1.0	1.2	1.5	1.8	1.9	2.0	2.1	2.0	1.8	1.7	1.4	1.2	1.0
22	1.0	1.2	1.6	1.9	1.8	2.0	1.8	1.9	1.8	1.8	1.3	1.2	1.0
23	1.0	1.1	1.8	1.7	2.0	2.4	2.2	2.2	1.7	1.9	p1.5c	1.2	1.2
24	0.8	1.0	1.2	1.7	1.8	1.8	1.8	1.9	1.8	1.8	1.4	1.2	1.0
25	1.0	1.2	1.3	1.8	1.8	1.8	1.9	1.8	1.7	1.7	1.6	1.4	1.0
26	0.8	1.0	1.2	1.6	1.8	1.8	1.8	1.6	1.7	p1.6c	p1.6c	p1.4c	p1.0c
27	1.0	1.0	1.3	1.6	1.7	2.0	1.8	1.8	1.8	1.8	1.3	1.3	1.0
28	0.6	0.8	1.2	1.4	1.5	1.7	1.7	1.8	1.7	1.7	1.3	1.2	0.8
29	1.0	1.3	1.2	1.4	1.8	1.7	1.8	1.8	1.8	1.7	1.7	1.2	1.0
30	1.0	1.2	1.2	1.4	1.7	1.7	1.8	1.8	1.8	1.8	1.3	1.0	0.8
31	1.0	1.2	1.4	1.3	1.8	1.8	1.8	1.7	1.8	1.8	1.1	1.0	0.9
MEAN*	1.0	1.1	1.3	1.6	1.8	1.9	1.8	1.9	1.8	1.8	1.5	1.3	1.0

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2.0	2.6	3.0	3.4	3.5	3.6	3.6	3.4	3.3	3.1	2.8	2.4	1.2
2	2.1	2.8	3.0	3.3	3.5	3.6	3.6	3.5	3.8	3.6	2.8	2.3	1.4
3	2.0	2.8	3.0	3.5	3.5	3.5	3.5	3.5	3.6	3.3	2.8	2.8	1.7
4	2.2	2.8	3.2	3.4	3.4	3.4	3.8	3.6	3.2	3.1	2.8	2.4	1.3
5	2.0	2.7	3.0	3.2	3.6	3.5	p3.6c	p3.6c	3.7	3.3	2.8	2.4	1.3
6	2.1	2.7	3.0	3.4	3.7	3.6	3.5	3.6	3.6	p3.2a	2.8	2.2	1.4
7	2.1	2.8	3.0	3.6	3.7	3.8	...c	...c	...c	...c	...c	...c	...c
8	...c	...c	...c	3.3	3.5	p3.6a	p3.6a	p3.5a	3.4	2.9a	2.8	2.3	1.4
9	2.1	2.5	3.0	3.6	4.0a	3.8	p4.1c	3.8	3.3	3.2	3.0	2.5	1.7
10	2.0	2.6	3.1	3.4	3.5	3.8	3.6	3.5	3.5	3.0	2.8	2.3	1.3
11	2.1	2.6	2.8	3.3	3.5	3.5	3.5	3.8	3.3	3.2	3.0	2.4	0.9
12	2.0	2.8	3.1	3.2	3.4	3.5	3.5	3.8	3.8	3.2	3.1	2.4	1.3
13	2.1	2.7	3.0	3.4	3.4	3.5	3.6	3.5	3.4	3.6	3.0	2.2	1.9
14	2.0	2.8	2.8	3.4	3.5	3.5	3.7	4.0	3.5	3.4	2.8	2.4	1.5
15	p2.0c	p2.7c	p2.9c	3.3	3.7	3.3	3.7	3.5	4.0	3.4	3.0	2.4	1.6
16	1.9	2.7	3.0	3.2	3.6	3.9	3.6	3.5	3.4	3.2	3.1	2.6	1.4
17	1.9	2.6	3.0	3.3	3.5	3.6	3.6	3.9	3.4	3.1	2.7	2.3	1.5
18	1.9	2.6	3.1	3.3	3.6	3.5	3.9	3.7	3.4	3.2	2.9	2.4	1.4
19	2.0	2.7	3.0	3.4	3.5	3.5	3.6	3.7	3.6	3.2	2.8	2.2	1.8
20	1.9	2.6	p3.0c	3.5	3.4	3.6	3.7	3.6	3.5	3.2	2.8	2.4	1.8
21	2.0	2.6	3.2	3.4	3.4	3.8	3.6	4.0	4.1	3.7	p3.1c	2.5	1.5
22	2.0	2.6	3.0	3.4	3.5	3.7	3.6	3.7	3.5	3.3	2.9	2.8	1.6
23	2.0	2.6	3.1	3.4	3.4	3.8	3.9	3.8	3.6	3.3	p2.8c	2.6	1.5
24	2.0	2.6	2.9	3.3	3.5	3.5	3.6	3.6	3.5	3.3	2.8	2.4	1.6
25	2.0	2.6	3.0	3.4	3.5	3.5	3.8	3.7	3.8	3.2	2.8	2.4	1.5
26	1.9	2.7	3.0	3.2	3.5	3.6	3.6	3.5	3.4	p3.2c	p2.8c	p2.4c	p1.5c
27	2.0	2.6	3.1	3.4	3.4	3.5	3.6	3.5	3.5	3.4	3.0	2.6	1.6
28	1.8	2.6	3.1	3.2	3.4	3.5	3.6	3.7	3.4	3.2	2.8	2.6	1.2
29	1.9	2.6	3.2	3.4	3.5	3.6	3.5	p3.6c	3.5	3.4	3.0	2.4	1.4
30	1.5	2.7	3.1	3.4	3.5	3.6	3.7	3.6	3.5	3.2	2.8	2.5	1.8
31	2.0	2.6	3.0	p3.2c	3.4	3.5	3.6	3.7	3.4	3.2	2.8	2.6	1.7
MEAN*	2.0	2.7	3.0	3.4	3.5	3.6	3.6	3.6	3.5	3.3	2.9	2.4	1.5

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 291

JANUARY 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1944

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	3.8	3.8	p3.3f	p2.9f	2.4f	2.2f	5.1	7.1	7.6	7.9	8.3	7.5	8.5	9.0	9.4	9.6	9.0	8.9	8.8	8.0	7.2	7.4	7.6	6.7	6.8
2	5.9	5.2	4.9	p4.0f	p3.0f	p2.0f	5.0	7.1	7.8	7.9	7.2	7.5	7.4	8.2	9.1	8.9	8.7	8.4	8.3	8.0	7.2	5.5f	5.0f	4.8f	6.5
3	4.0f	3.7f	4.0f	p3.5f	p3.0f	2.5f	5.3	6.7	7.8	8.4	8.4	7.2	7.0	6.8	7.5	7.8	8.0	8.1	7.7	7.2	p5.6a	p5.4a	p5.2a	p4.8a	6.1
4	p4.6a	p4.3a	p4.0a	3.8a	p3.1a	p2.4a	4.8	6.9	7.8	7.5	7.7	7.5	7.4	8.0	8.4	8.4	8.2	8.2	8.0	8.0	7.6	6.4	6.1	5.5	6.4
5	4.9f	4.5f	p4.0a	p3.4a	p2.8a	2.2f	4.5	6.5	7.5	7.4	6.5	6.3	6.4	6.6	7.8	7.8	7.2	6.8	7.3	7.3	6.6	4.9	4.6a	5.4a	5.8
6	4.9a	4.8a	p4.3a	p3.8a	3.3a	2.0a	5.3	6.8	8.0	8.3	8.7	9.6	9.4	10.2	10.5	10.0	10.0	10.1	9.8	9.0	7.8	6.6	4.9	3.8	7.2
7	3.1	2.6	2.2	1.9	1.8	2.0f	4.1	6.1	7.0	7.0	6.1	6.6	6.9	7.5	8.8	9.2	9.3	9.0	8.3	7.9	7.0	4.7	3.2f	2.6f	5.6
8	p2.6f	p2.5f	p2.4f	p2.2f	2.2f	1.9f	4.6	6.3	7.4	7.6	7.2	6.5	6.5	7.0	7.4	7.9	8.3	8.2	7.7	7.2	6.1	5.3	4.2	2.9	5.5
9	2.5f	2.3f	1.9f	1.8f	1.8f	p1.5f	4.5	5.8	6.8	p6.6c	6.3	6.4	6.4	6.6	7.2	7.7	8.6	7.8	7.6	6.1	4.2	3.8	3.7	2.6	5.0
10	2.1	2.9f	p2.1f	1.4b	p1.4b	1.3b	4.3	6.0	6.4	6.0	6.1	5.6	5.8	6.1	6.2	6.5	7.2	7.9	8.3	7.6	6.0	5.4	5.0	2.9	5.0
11	2.5	2.2	2.1f	p2.0a	p1.9a	p1.8a	4.8	7.3	7.5	6.2	5.8	5.8	5.9	6.4	p6.8c	p7.2c	p7.6c	7.9	8.3	8.0	6.8	6.6	7.6	6.8	5.7
12	6.3	5.5f	5.4f	4.5f	2.6	1.8	4.8	6.9	8.0	7.5	6.5	6.4	7.2	7.3	8.0	8.5	9.3	9.2	8.3	8.4	7.7	6.6	5.5f	4.8	6.5
13	4.0	2.8f	2.5f	2.8f	2.2	1.6	4.5	6.8	7.9	7.4	7.2	6.5	7.2	7.7	7.4	8.9	10.0	9.1	8.8	8.8	7.6	6.0f	4.6	4.0	6.1
14	3.8f	3.8f	3.7f	3.7f	3.6f	3.0	4.8	7.0	8.3	7.8	6.6	6.7	6.4	7.0	7.9	8.1	9.1	8.7	8.7	7.1	6.4	5.5	4.6	4.3f	6.1
15	p4.0f	p3.6a	p3.2a	p2.8a	p2.4a	2.0f	4.5	6.7	8.3	9.0	8.3	7.1	7.2	7.3	8.4	8.9	8.5	8.1	7.8	7.8	8.0	7.6	6.4	6.0	6.4
16	5.5	4.6	3.7	2.2b	p2.1b	p2.0b	4.3	6.3	6.9	7.2	6.5	6.5	6.6	6.8	8.1	8.7	9.0	9.4	9.5	8.5	p7.0f	5.5f	4.7f	4.0f	6.1
17	3.7f	3.5f	3.4f	3.2	2.4	1.9	4.5	6.9	8.2	8.6	7.6	7.4	7.4	8.3	8.8	9.1	9.2	8.8	8.9	9.7	8.7	7.7	6.7	6.2	6.7
18	p5.3f	4.4f	4.0	3.7	p2.9f	2.1f	4.5	6.6	7.6	7.9	6.8	p6.5c	6.1	6.8	8.0	8.7	8.7	8.7	8.5	7.6	...f	...f	...f	...f	...
19	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.9	7.9	7.7	7.0	7.0	7.4	8.4	8.5	8.7	8.4	7.4	6.5	5.1	4.5	4.5	...
20	p4.2f	3.9	2.3b	p2.2b	p2.2b	p1.9b	4.5	6.7	7.6	7.5	8.2	8.9	9.5	9.2	9.7	11.2	11.0	9.8	9.3	8.7	7.3f	p6.8f	p6.3f	p5.7f	6.9
21	p5.1f	p4.3f	3.5f	2.7	2.5	2.4	4.3	6.8	7.4	7.5	8.0	8.3	8.2	7.4	6.8	p6.7c	7.1	p7.5c	7.6	p6.8c	p5.9c	p5.0c	4.2f	4.5f	5.9
22	4.8f	4.4	3.6	3.0	3.1	3.4	4.1	6.2	7.2	8.0	8.1	8.8	9.4	9.5	10.2	11.1	10.5	9.2	8.7	8.3	8.4	7.9	p7.0a	p6.1a	7.1
23	p4.9a	3.7f	p3.4f	3.0f	2.3	1.6	4.1	6.1	7.3	8.1	8.4	8.9	9.2	8.9	9.4	9.6	9.3	9.3	8.7	7.6	7.1	6.5	6.2	6.2	6.7
24	6.1	4.3	3.1	2.1	1.5	1.5	3.7	5.8	6.6	7.0	7.5	7.8	8.0	8.6	9.4	10.0	9.7	9.2	8.9	8.7	8.7	7.9	6.0	5.1	6.6
25	4.8	3.0	1.9	1.8	1.9f	1.8	4.2	6.3	p6.8	p6.7	p6.3	6.1	7.8	7.6	8.7	9.1	9.0	8.6	8.4	8.0	7.3	6.7	5.8f	4.8f	6.0
26	4.7	3.6	2.3	1.9	1.8	1.7	3.9	6.5	7.7	8.3	7.1	6.9	6.6	6.6	7.3	7.9	8.2	8.3	8.7	8.4	7.0	6.6c	5.2	5.5	5.9
27	5.0	4.8	4.1	p3.4c	p2.8c	p2.2c	4.8	6.9	7.7	8.3	7.4	6.7	6.4	6.8	8.0	8.7	9.2	9.0	8.2	7.9	6.2	4.8	4.3	3.8	6.1
28	3.7	3.3	p2.9b	p2.5b	p2.0b	p1.5b	4.3	6.4	8.0	7.9	6.9	6.7	6.6	6.9	7.6	8.2	8.9	8.9	8.2	7.4	5.9	4.3	4.0	4.0	5.7
29	3.5	3.3	p2.9a	p2.6a	p2.1a	p1.9a	4.2	6.8	7.7	8.2	6.8	6.5	6.7	6.6	8.2	9.2	9.0	8.9	8.5	8.4	7.3	p6.7a	p6.1a	p5.5a	6.2
30	p5.0a	p4.5f	p3.9f	3.3f	p2.7f	2.1	4.3	6.1	7.4	p7.5c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
31	3.9	2.7	2.1	2.0	1.9	1.4	3.8	6.0	7.3	6.5	5.9	6.1	6.5	7.3	8.8	9.5	9.1	8.9	8.4	6.0	5.5f	p5.0a	p4.6f	p4.2f	5.6
MEAN*	4.3	3.8	3.2	2.8	2.4	2.0	4.5	6.6	7.5	7.6	7.2	7.1	7.2	7.5	8.2	8.7	8.8	8.6	8.4	7.9	6.9	6.0	5.3	4.8	6.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 292

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1944

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	320	310	280	260	280	350f	250	270	290	340	390	350	340	340	360	400	330	320	260	280	290	270	260	260	308
2	240	250	280	300	330	300	250	270	320	370	380	370	385	365	360	340	325	300	250	250	290	350	360	330	315
3	310	290	290	260	250	240	250	290	300	340	350	400	410	390	360	350	320	310	250	290	280	q290a	q340a	q330a	312
4	290	q290a	q290a	290	240	260	240	280	300	355	365	360	370	350	350	350	320	280	250	240	290	310	320	330	305
5	320	310	340	330	290	280	250	280	310	380	400	420	410	375	370	325	330	320	260	250	320	380	q330a	280	328
6	230	235	270	270	230	240	240	280	280	330	330	330	330	330	330	340	330	290	250	230	240	270	290	280	282
7	280	280	350	350	340	380	250	300	330	340	390	400	390	380	330	325	320	320	270	240	330	340	450	500	341
8	q450a	q400a	q340a	q280a	230	240	230	310	320	360	360	410	400	400	365	330	310	280	250	230	260	280	240	250	314
9	250	250	250	280	235	240	250	320	335	q380c	410	390	390	390	360	320	290	280	250	240	240	250	250	280	297
10	270	290	270	260b	240b	350b	240	300	320	380	400	480	460	420	370	380	315	290	250	230	230	250	290	280	315
11	260	320	360	300	270	280	250	270	310	430	450	430	500	440	q410c	q380c	q350c	320	250	275	300	290	270	240	331
12	250	270	250	210	230	270	250	280	310	315	405	390	380	370	320	330	310	280	250	250	290	300	330	320	298
13	300	300	260	230	250	250	260	300	310	310	370	360	400	370	330	315	280	280	300	260	320	360	390	390	312
14	350	300	230	230	220	230	240	280	320	370	410	380	420	420	340	330	290	265	240	240	310	310	300	280	304
15	250	270	q270a	q270a	270	240	240	270	300	310	320	400	400	400	360	340	340	320	250	230	260	280	270	300	298
16	305	270	240	250b	q250b	q240b	240	300	360	390	430	390	390	400	400	370	350	320	280	300	350	360	370	370	330
17	330	310	230	230	240	280	260	280	320	350	390	380	380	360	360	360	330	320	280	260	270	280	290	305	308
18	340	355	350	380	380f	280	250	270	300	365	430	q440c	450	390	350	345	345	300	270	340	...f	...f	...f	...f	...
19	...c	...c	...c	...c	...c	...c	...c	...c	...c	330	370	425	410	430	390	350	340	330*	270	280	330	360	370	300	...
20	q270f	235	230b	q220b	q230b	q240b	250	260	290	320	370	365	380	370	370	340	320	330	280	290	400f	q440a	q480a	q490a	324
21	q460f	q380a	310f	290	300	300	250	260	290	345	375	370	390	390	400	q370c	350	330	270	280	330	q340c	360	300	335
22	250	235	230	235	240	260	255	270	320	320	360	360	340	360	350	350	320	215	265	280	300	320	q320a	q280a	293
23	q300a	320f	q280f	250	240	270	260	270	315	340	350	350	350	360	370	360	q340a	320	270	260	260	280	280	250	302
24	220	225	230	255	270	290	265	280	350	385	350	385	370	360	350	350	340	300	270	240	280	290	310	300	303
25	240	235	260	285	300	290	250	260	q330	q365	q530	360	330	330	310	325	345	325	280	260	260	310	315	280	307
26	230	220	250	260	250	250	255	290	310	345	390	430	390	400	400	350	300	300	260	240	275	q290c	280	280	302
27	250	270	290	q280c	q280c	q280c	270	275	310	365	410	400	380	405	360	310	290	270	250	270	280	340	320	295	310
28	270	250	q260b	q270a	q270a	q260a	250	270	285	340	390	420	370	420	360	320	300	280	250	230	230	220	230	240	291
29	250	290	q280a	q260a	q250a	q250a	250	280	330	340	380	390	390	390	350	325	340	310	250	280	370	q340a	310	250	311
30	280	310	q270a	230	230	240	240	260	270	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
31	275	240	240	250	230	250	250	280	310	360	435	410	410	360	340	330	330	320	270	300	270	275a	q285a	q300a	305
MEAN*	288	284	276	269	262	271	250	280	312	352	390	392	390	382	359	344	323	301	262	262	292	309	318	307	311

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 293

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1944

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.0	4.5	4.5	4.5	4.6	4.6	4.5	4.4	4.5	4.3	4.1	...
2	...	3.9	4.3	4.5	4.4	4.5	4.5	4.4	4.4	4.3	4.2	4.1	...
3	...	4.2	4.2	4.5	4.5	4.4	4.5	4.4	4.4	4.4	4.3	4.2	...
4	...	4.2	4.4	4.5	4.5	4.4	4.4	4.4	4.4	4.3	4.2	4.2	...
5	...	4.1	4.3	4.5	4.4	4.4	4.4	4.4	4.3	4.2	4.3	4.2	...
6	...	4.3	4.3	4.4	4.5	4.4	4.4	4.4	4.3	4.3	4.2	4.2	...
7	...	4.1	4.2	4.2	4.4	4.4	4.4	4.5	4.3	4.3	4.3	4.2	...
8	...	4.2	4.5	4.3	4.4	4.4	4.3	4.3	4.3	4.3	4.2	4.0	...
9	...	4.3	4.2	p4.3c	4.3	4.4	4.4	4.3	4.3	4.2	4.0	4.2	...
10	...	4.2	4.3	4.2	4.3	4.4	4.4	4.4	4.3	4.3	4.3	4.3	...
11	...	4.2	4.3	4.3	4.3	4.4	4.4	4.4	p4.3c	p4.3c	p4.3c	4.4	...
12	...	4.0	4.2	4.3	4.4	4.5	4.5	4.5	4.4	4.3	4.5	4.1	...
13	...	4.1	4.3	4.3	4.5	4.4	4.5	4.5	4.4	4.4	4.3	4.0	...
14	...	4.0	4.5	4.5	4.5	4.4	4.5	4.6	4.5	4.5	4.3	4.0	...
15	...	4.0	4.4	4.4	4.4	4.5	4.5	4.6	4.5	4.3	4.3	4.0	...
16	...	4.0	4.3	4.2	4.3	4.3	4.4	4.5	4.4	4.3	4.4	4.3	...
17	...	4.0	4.3	4.4	4.6	4.7	4.5	4.4	4.5	4.4	4.3	4.2	...
18	...	3.9	4.1	4.4	4.6	p4.5c	4.4	4.4	4.4	4.5	4.4	4.0	...
19	...	p4.0c	p4.2c	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.1	...
20	...	4.0	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.3	4.1	4.1	...
21	...	3.9	4.2	4.4	4.6	4.5	4.5	4.6	4.4	4.4	4.3	4.1	...
22	...	4.1	4.2	4.3	4.5	4.5	4.5	4.5	4.4	4.4	4.2	...	...
23	...	3.9	4.2	4.4	4.5	4.6	4.5	4.5	4.5	4.4	4.2	4.2	...
24	...	4.0	4.3	4.5	4.5	4.5	4.4	4.4	4.4	4.3	4.2	4.0	...
25	...	3.9	4.2	4.2	4.2	4.6	4.5	4.5	4.4	4.3	4.3	4.1	...
26	...	4.0	4.3	4.3	4.5	4.4	4.5	4.4	4.3	4.3	4.1	4.0	...
27	...	4.0	4.3	4.4	4.4	4.4	4.4	4.7a	4.4	4.4	4.2	4.0	...
28	...	4.0	4.3	4.5	4.5	4.5	4.4	4.6	4.5	4.4	4.4	4.2	...
29	...	4.2	4.7	4.3	4.6	4.5	4.4	4.6	4.4	4.3	4.4	4.0	...
30	...	4.0	4.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
31	...	3.9	4.2	4.3	4.5	4.4	4.4	4.4	4.4	4.3	4.2	4.2	...
* MEAN	....	4.0	4.3	4.4	4.4	4.5	4.4	4.5	4.4	4.3	4.3	4.1	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	220	200	210	210	200	200	210	200	190	250	...
2	...	230	200	200	210	200	200	200	190	190	210	230	...
3	...	220	220	220	200	200	190	190	240	210	220	230	...
4	...	220	210	200	200	200	200	200	200	200	p215a	230	...
5	...	220	220	210	210	205	205	200	200	200	200	230	...
6	...	p220a	215	205	200	205	200	200	190	p200a	225	240	...
7	...	230	210	190	200	190	200	205	210	190	200	230	...
8	...	230	200	190	190	190	200	200	200	190	215	230	...
9	...	220	220	p210c	200	200	200	190	190	190	200	230	...
10	...	220	190	200	190	200	190	200	200	190	200	240a	...
11	...	220	220	220	200	200	190	200	p200c	p200c	p210c	240	...
12	...	220	215	205	200	200	190	190	200	210	205	220	...
13	...	225	220	210	215	205	205	190	200	200	220a	240	...
14	...	220	200	210	215	200	200	200	200	200a	200	230	...
15	...	225	210	210	195	190	200	190	200	205	210	235	...
16	...	235	220	210	200	200	200	200	p200c	p200c	p210c	230	...
17	...	220	220	210	205	210	205	190	200	200	215	240	...
18	...	230	220	220	210	p200c	200	195	200	220	220	240	...
19	...	p230c	p220c	220	215	210	200	190	200	215	235	240	...
20	...	220	215	210	210	200	205	210	200	200	210a	225	...
21	...	230	220	200	210	205	p205c	210	p200a	190	200	255	...
22	...	235	220	215	205	205	200	200	200	200	200	...	...
23	...	230	210	200	210	210	200	200	200	200	220	235	...
24	...	240	235	210	200	200	200	200	215	210	225	230	...
25	...	230	230	p220	210	200	200	200	190	200	230	225	...
26	...	p230a	220	210	200	200	200	210	200	195	200	245	...
27	...	235	225	220	200	200	190	p200a	210	220	210	220	...
28	...	p220c	210	200	205	200	190	190	200	200	215	p225c	...
29	...	220	200	190	200	200	200	190	200	190	185	230	...
30	...	215	210	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
31	...	225	210	190	190	190	200	200	200	200	200	220	...
* MEAN	...	226	215	207	204	201	199	198	202	200	210	233	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 294

JANUARY 1944 | JANUARY 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.0	1.6	1.4	1.6	1.8	1.8	2.0	1.8	1.6	1.2	1.0	0.9
2	1.0	1.2	1.4	1.7	1.7	1.7	1.7	1.8	1.7	1.5	1.2	1.0	0.9
3	0.9	1.2	1.3	1.7	1.8	1.8	1.8	1.8	1.8	1.4	1.2	1.0	0.6
4	1.0	1.0	1.2	1.4	1.6	1.8	1.8	1.8	1.7	1.7	1.3	1.2	1.0
5	0.8	1.0	1.2	1.6	1.7	1.7	1.8	1.7	1.8	1.8	1.2	1.0	1.0
6	0.9	1.2	1.4	1.7	1.8	1.7	1.8	1.8	1.8	1.7	1.8	1.6	1.0
7	0.6	1.0	1.2	1.6	1.7	1.7	1.8	1.8	1.8	1.7	1.6	1.2	1.0
8	0.7	1.0	1.0	1.2	1.6	1.7	1.7	1.7	1.7	1.7	1.8	1.2	1.0
9	0.6	1.0	1.2	p1.5c	1.7	1.8	1.8	1.8	1.8	1.8	1.2	1.0	1.0
10	0.8	1.0	1.0	1.4	1.7	1.7	1.7	1.8	1.8	1.7	1.6	1.0	1.0
11	0.6	1.0	1.2	1.4	1.6	1.8	1.8	1.7	p1.7c	p1.7c	p1.4c	1.2	1.0
12	1.0	1.2	1.0	1.4	1.4	1.4	1.8	1.4	1.4	1.7	1.4	1.2	1.0
13	0.8	1.8	1.2	1.4	1.4	1.8	1.8	1.8	2.0	1.4	1.4	1.3	1.2
14	1.2	1.2	1.4	1.4	1.5	1.7	1.8	1.8	1.9	1.9	1.4	1.3	1.2
15	1.0	1.2	1.4	1.4	p1.5c	p1.6c	p1.7c	p1.8c	p1.5c	p1.4c	1.4	1.2	1.0
16	p0.9c	0.9	1.3	1.4	1.5	1.5	p1.7c	p1.8c	p1.7c	p1.6c	1.5	p1.4c	p1.4c
17	p1.0c	1.4	1.4	1.4	1.4	p1.5c	p1.7c	p1.7c	p1.6c	p1.5c	p1.4c	1.2	1.0
18	p1.0c	1.3	1.4	1.4	...c	...c	...c	...c	...c	...c	...c	...c	1.3
19	p1.0c	p1.3c	p1.4c	1.4	1.5	...c	...c	...c	...c	...c	...c	1.3	p1.1c
20	p1.0c	1.4	1.5	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
21	1.0	...c	...c	...c	...c	...c	...c	...c	...c	1.7	1.8	1.6	1.2
22	1.0	1.0	1.3	1.6	1.7	1.8	p1.9c	2.0	1.7	1.6	1.4	1.2	0.9
23	1.0	1.2	1.7	1.8	1.9	2.0	2.1	2.0	p1.9c	p1.8c	1.7	1.4	1.1
24	0.9	1.0	1.2	1.5	1.7	1.7	1.7	2.0	1.6	1.6	1.4	1.2	1.2
25	1.0	1.2	1.4	1.2	1.2	1.8	1.8	1.9	1.7	1.6	1.4	1.3	1.0
26	1.0	1.0	1.0	1.6	1.7	1.6	1.8	1.8	1.8	1.6	1.4	1.1	1.0
27	p1.0c	p1.2c	1.4	...c	...c	...c	...c	...c	...c	...c	1.8	1.6	1.3
28	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
29	p1.0c	p1.2c	p1.3c	p1.6c	p1.8c	1.8	1.9	1.8	1.8	1.7	1.7	1.3	1.0
30	1.0	1.3	1.6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
31	1.0	1.0	1.3	1.7	1.7	1.7	1.9	1.9	1.8	1.7	1.7	1.2	1.0
* MEAN	0.9	1.1	1.3	1.5	1.6	1.7	1.8	1.8	1.7	1.6	1.5	1.2	1.0

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2.0	2.6	3.0	3.2	3.6	3.6	3.6	3.5	3.5	3.1	2.8	2.6	1.6
2	1.8	2.4	2.9	3.2	3.4	3.5	3.5	3.4	3.4	3.0	3.0	2.4	1.6
3	1.8	2.6	3.0	3.2	3.4	3.5	3.4	3.6	3.9	3.5	2.9	2.4	1.7
4	1.9	2.6	2.9	3.2	3.4	3.5	3.4	3.5	3.4	3.2	2.8	2.6	1.7
5	1.8	2.4	2.8	3.3	3.4	3.5	3.5	3.5	3.4	3.1	2.9	2.4	1.8
6	1.9	2.8	3.0	3.2	3.4	3.6	3.6	3.5	3.4	3.3	3.2	2.7	1.8
7	1.4	2.5	3.1	3.3	3.5	3.7	3.6	3.6	3.9	3.4	3.1	3.2	2.0
8	1.7	2.8	3.1	3.2	3.4	3.5	3.5	3.5	3.7	3.1	2.8	2.0	2.0
9	1.8	2.5	3.0	p3.2c	3.5	3.5	3.6	3.5	3.5	3.3	2.8	2.7	1.7
10	1.8	2.3	2.8	3.2	3.4	3.5	3.6	3.5	3.4	3.2	3.1	3.1	1.8
11	1.9	2.6	3.0	3.2	3.4	3.4	3.5	3.4	p3.4c	p3.1c	p2.8c	2.4	1.4
12	1.6	2.4	2.8	3.1	3.4	3.5	3.6	3.5	3.5	3.3	2.8	2.2	2.3
13	1.6	2.5	2.8	3.2	3.4	3.5	3.6	3.5	3.6	3.2	3.0	2.9	2.3
14	1.8	2.6	2.7	3.0	3.4	3.4	3.5	3.5	3.5	3.2	2.8	2.5	1.7
15	1.8	2.5	2.9	3.2	3.4	3.3	3.5	3.5	3.3	3.2	2.9	2.6	1.3
16	1.4	2.6	2.8	3.2	3.4	3.6	3.5	p3.5c	p3.3c	p3.2c	p2.9c	2.6	p1.8c
17	p1.3c	p2.6c	2.9	3.2	3.3	3.6	3.6	3.5	3.4	3.2	3.0	2.6	1.6
18	1.3	2.4	3.0	3.1	3.4	p3.6c	3.6	3.5	3.4	3.2	3.0	p2.5c	1.3
19	p1.3c	p2.4c	p3.0c	3.3	3.4	3.5	3.6	3.5	3.5	3.2	p3.0c	2.7	1.6
20	1.3	2.3	3.0	3.4	3.6	3.6	3.7	3.6	3.4	3.1	p3.0c	2.7	1.8
21	1.7	2.7	3.2	p3.4c	p3.5c	p3.6c	p3.7c	p3.6c	p3.4c	3.2	3.1	2.5	1.8
22	1.6	2.6	3.0	3.4	3.5	3.6	p3.7c	p3.5c	3.0	3.0	2.8	2.4	1.8
23	1.6	2.5	2.9	3.2	3.5	3.8	3.8	3.6	3.6	p3.3c	3.0	2.6	1.9
24	1.4	2.5	3.0	3.0	3.5	3.6	3.6	3.8	p3.6a	3.3	3.1	2.5	2.1
25	1.7	2.5	3.0	2.9	3.2	3.6	3.5	3.4	3.3	3.3	3.2	2.4	2.2
26	1.7	2.5a	3.0	3.2	3.4	3.5	3.6	3.5	3.4	3.2	2.6	2.5	1.6
27	1.4	p2.5c	2.7	p3.1c	3.4	3.5	3.5	p3.5c	3.4	3.2	2.9	2.4	1.8
28	p1.6c	p2.5c	p2.7c	p2.9c	3.1	3.4	3.5	3.4	3.5	3.3	3.1	p2.5	p1.7c
29	p1.6a	p2.5a	p2.8a	p3.0a	p3.4c	3.5	3.5	3.6	3.4	3.4	2.9	2.5	1.7
30	1.7	2.5	2.9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
31	1.6	2.4	2.9	3.2	3.4	3.5	3.5	3.5	3.4	3.2	2.9	2.5	1.7
* MEAN	1.6	2.5	2.9	3.2	3.4	3.5	3.6	3.5	3.5	3.2	3.0	2.6	1.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 295

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1944 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND FEBRUARY 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	3.8	3.7	3.0	2.6	2.5	2.2	4.1	6.6	7.7	7.6	7.7	8.1	8.2	7.8	9.4	9.4	9.6	8.9	8.0	7.3	6.2	4.2	3.1	2.7	6.0
2	2.8	2.3	2.3	2.1f	2.0f	1.8f	4.0	6.5	7.1	7.5	8.0	8.0	7.8	7.2	7.0	6.8	6.5	6.2	6.6	7.0	6.2	5.7f	5.5f	p5.2f	5.5
3	4.8f	4.1	3.6f	3.2	2.7	1.6	3.9	6.4	7.7	8.3	8.5	8.5	9.4	9.0	9.1	9.8	9.8	9.5	8.2	8.2	8.7	8.1	p7.0f	p6.0f	6.9
4	p5.0f	4.7f	3.7f	4.2f	3.7	2.5	4.0	5.8	6.4	6.8	7.3	7.3	7.7	8.4	8.6	9.0	9.1	9.7	9.3	8.3	7.5	7.1	p6.3f	p5.5f	6.6
5	p4.6f	3.8f	3.4f	3.1f	2.4	1.4	3.5	5.5	6.3	6.2	6.1	6.4	6.6	6.5	7.4	8.0	8.4	7.9	7.4	7.8	6.0	3.4	2.7	3.1	5.3
6	2.8	2.6	2.1	1.6	1.2	p1.0b	3.6	6.0	6.7	6.8	6.9	7.0	7.6	7.8	9.1	8.6	7.8	8.0	7.9	8.7	7.2	5.9f	5.7f	p4.6f	5.7
7	3.4f	2.5	1.1b	1.0b	1.2	1.4	3.9	6.0	7.2	7.7	8.0	9.2	9.7	10.0	10.0	9.4	9.4	9.6	10.7	10.6	7.6	6.6	5.6	5.3	6.5
8	5.1f	p4.4f	3.7	3.3	2.2	1.8	3.5	6.0	7.0	8.4	7.5	7.3	7.5	9.0	10.3	9.2	9.1	9.3	9.6	9.7	8.1	7.0	5.7	5.2	6.7
9	4.6	4.1	3.3	2.8	2.6	2.1	3.8	6.0	7.2	6.7	7.5	7.1	7.4	8.0	9.0	9.3	9.4	9.0	9.0	8.9	8.0	7.1	6.5	p6.0a	6.5
10	p5.4f	4.9	3.8	3.1f	2.0f	1.5	3.8	6.3	6.8	6.4	6.1	5.9	6.6	7.5	8.3	8.0	8.3	8.0	7.5	7.1	p6.1f	5.1	4.7	4.3	5.7
11	4.2	3.8f	3.5f	2.4	1.5	p1.3b	3.8	6.2	7.8	7.7	6.4	6.8	6.6	7.4	8.1	8.4	8.6	8.9	8.9	8.4	p7.5a	p6.6f	p5.8f	p4.9f	6.1
12	4.0f	p3.6f	3.1f	2.3f	1.8b	1.7b	3.7	6.0	6.9	6.7	6.3	6.6	7.5	8.6	9.4	9.0	8.7	8.6	8.5	7.9	7.7	7.3	6.3	5.2	6.1
13	4.4	3.6	2.2	1.3	1.3b	p1.1b	3.8	6.3	7.7	6.7	5.9	5.7	5.6	6.3	7.2	8.0	8.4	8.3	8.4	8.2	7.9f	p6.7f	p5.5f	4.3f	5.6
14	p3.9f	3.5f	p3.2f	p2.9f	p2.7f	2.4	3.8	6.9	7.3	7.3	7.1	6.3	6.7	6.7	6.8	7.4	8.0	8.6	8.4	7.7	7.8f	6.2f	p5.7f	p5.1f	5.9
15	p4.5f	p4.0f	3.5f	p2.9f	2.3f	2.2f	4.1	5.9	7.0	7.3	7.9	8.7	6.8	6.6	7.1	7.7	8.8	8.9	9.0	8.5	8.0	7.9	6.6	6.3	6.4
16	6.3	5.2	4.0	2.2	1.3	p1.1b	4.0	6.0	7.1	7.4	7.0	6.6	6.1	6.3	7.0	7.6	8.1	8.2	8.6	8.5	8.0	7.2	6.6	5.9	6.1
17	5.5	4.5	3.8	3.6	p3.0f	2.5	4.4	5.7	6.5	7.3	8.0	8.2	7.6	6.7	6.7	6.7	6.9	6.8	6.8	6.9	6.6	6.3	5.5	5.5	5.9
18	5.4	4.7	3.9	3.5	3.0	2.4	4.3	5.8	6.4	7.1	7.9	8.3	8.3	8.1	7.5	7.6	7.8	8.0	7.8	7.2	6.9	6.7f	6.8	6.7	6.3
19	6.7	5.9	4.2	3.3	1.8	1.4	3.6	6.0	7.2	7.3	7.8	8.2	7.8	7.8	7.8	8.2	8.0	7.9	7.7	7.1	6.6	5.2	5.4f	4.8f	6.2
20	4.7f	4.9	3.9	3.0	2.3	1.7	3.8	5.8	6.6	7.7	8.2	8.1	8.5	10.1	9.5	9.0	p8.5c	p8.0c	p7.5c	p7.1c	6.6f	p6.8f	7.1	7.7	6.5
21	7.2	5.8	5.3	5.3	4.6	3.7	4.5	6.8	7.8	8.4	7.5	7.5	7.4	8.2	9.2	9.4	9.5	9.1	8.6	7.9	6.9	7.2	7.5	7.4	7.2
22	7.5	6.6	4.4	3.0	2.7	2.5	3.8	6.4	7.5	7.1	6.7	7.1	7.4	8.3	8.6	9.0	9.2	9.3	9.4	8.4	7.3	7.7	7.8f	7.8f	6.9
23	6.6	4.3	2.4	1.3	0.9b	p0.8b	3.6	6.3	7.4	6.9	6.6	6.7	7.5	8.6	9.2	9.9	9.5	9.4	9.4	8.6	8.0f	p7.2f	p6.4f	p5.6f	6.4
24	4.8f	4.5f	3.9f	2.8	2.5	2.5	3.8	6.3	7.3	6.5	6.4	6.3	6.5	6.8	7.2	7.6	p8.2a	8.8	8.7	9.0	9.0	8.2	7.6	6.9	6.3
25	6.7	5.1	3.1	2.2	1.6	1.4	p2.9c	6.5	p7.7	7.6	6.3	6.3	6.3	6.8	7.3	8.2	8.2	8.3	8.2	7.9	10.5	p6.7f	4.9f	4.8	6.1
26	4.2	3.3	2.5	2.3	1.5b	1.3b	3.6	6.1	7.3	8.1	6.3	5.7	5.9	6.7	7.7	8.3	8.8	9.0	9.2	8.2	7.5	6.6	5.4	4.7	5.8
27	3.9	3.1	2.2	1.3	1.1	p1.0b	3.6	6.1	7.2	7.9	7.7	7.2	6.9	6.6	6.7	7.4	7.6	7.9	7.8	7.5	6.7f	7.4	7.6	5.1	5.7
28	3.9	3.1	2.6	2.0	1.5	1.4	3.7	5.7	6.4	7.0	7.3	8.0	8.2	7.9	7.8	8.4	8.8	8.9	9.0	8.3	7.8	7.9	7.3	6.7f	6.2
29	5.5	4.9f	3.5f	2.9	2.5f	1.9f	3.8	6.3	6.8	7.5	7.8	7.5	7.1	7.0	7.2	7.4	7.5	7.2	6.9	7.0	7.5	7.1	6.4	6.7	6.1
30																									
31																									
MEAN*	4.9	4.2	3.3	2.7	2.2	1.8	3.8	6.1	7.1	7.3	7.2	7.3	7.4	7.7	8.1	8.4	8.5	8.5	8.4	8.1	7.5	6.7	6.0	5.5	6.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 296

FEBRUARY 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1944

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	310	280	220	230	220	240	240	260	300	330	350	380	360	390	330	320	310	280	250	220	210	220	240	240	280
2	240	250	280	300	280	250	250	260	300	350	410	360	360	380	390	390	370	330	250	260	300	320	280	270	310
3	240	270	290	240	220	250	250	270	300	320	310	360	320	330	320	340	330	300	250	250	250	250	270	280	284
4	300	300	270	230	220	230	250	280	310	350	330	330	350	320	315	310	320	290	250	270	270	270	310	310	291
5	300	300	260	230	230	250	250	320	330	370	380	400	390	350	340	320	290	280	250	230	220	225	240	280	293
6	300	260	230	240	250	290	240	290	330	340	370	350	340	330	290	290	300	300	240	230	280	280	280	310	290
7	300	220	260b	280b	250	250	250	315	280	305	320	320	330	335	340	360	320	300	240	220	230	250	280	330	287
8	350	310	230	220	230	280	250	260	310	330	300	360	350	310	270	300	310	280	250	240	240	240	250	270	281
9	250	250	230	230	240	240	250	270	320	360	330	340	370	350	310	310	280	280	250	260	280	300	330	330	290
10	300	230	210	230	230	240	260	270	310	340	360	400	400	340	310	310	280	250	250	260	290	270	290	290	288
11	300	280	250	240	250	q250b	250	260	300	330	390	380	380	350	320	310	290	270	250	280	260	240	405	380	301
12	320	250	240	240	240	260	250	280	310	330	390	400	350	330	320	310	305	280	240	260	250	220	240	250	286
13	270	230	230	250	330b	220b	240	280	305	350	405	370	450	400	340	305	305	280	250	290	250	270	360	350	305
14	310	300	300	390	450	300	260	270	320	320	350	400	390	400	380	330	300	270	250	280	280	260	290	370	324
15	310	230	280	240	230	240	240	250	260	290	340	370	390	410	380	340	290	300	300	270	300	250	250	260	292
16	250	250	240	240	250	q250b	240	250	290	360	390	420	430	430	370	330	320	300	250	250	230	240	280	290	298
17	280	300	300	290	260	240	240	250	280	310	340	370	390	420	410	380	340	310	240	250	280	310	240	250	303
18	240	210	220	230	240	240	240	240	270	300	270	340	350	380	360	350	330	300	250	250	280	250	220	230	275
19	230	220	230	220	230	250	250	250	290	340	350	360	360	360	350	330	320	290	240	270	320	320	320	290	291
20	250	210	230	230	230	230	240	230	290	310	300	310	q320c	330	350	340	q335c	q330c	q320c	q315c	310	230	230	250	280
21	230	230	230	230	230	230	250	240	310	330	360	350	360	340	320	320	300	280	250	260	240	250	220	220	274
22	220	210	210	230	240	260	250	250	300	330	350	360	340	340	330	310	310	290	260	280	260	270	260	240	279
23	200	220	220	250	290b	q270b	250	260	300	330	360	370	350	320	310	300	300	270	260	290	340	250	200	200	280
24	200	240	250	230	240	240	240	270	310	370	360	400	370	370	350	320	q300a	280	250	260	240	240	220	220	282
25	220	210	220	230	240	240	240	250	300	340	380	360	390	360	350	300	290	270	240	270	260	290	290	270	284
26	280	250	210	190	270b	290b	250	250	310	340	380	400	420	380	340	320	280	270	240	260	250	210	220	240	285
27	240	230	230	250	280	280	240	250	290	320	360	350	400	390	370	330	310	280	260	310	320	280	210	250	293
28	240	220	240	240	260	250	240	240	280	330	360	380	370	350	360	320	310	280	250	260	250	240	240	230	281
29	210	230	250	260	270	310	240	240	270	320	350	370	380	380	360	340	325	300	260	260	250	220	225	210	285
30																									
31																									
MEAN*	265	248	243	245	255	254	246	262	299	333	353	368	371	361	341	325	309	288	253	262	267	257	265	273	289

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 297

FEBRUARY 1944 — FEBRUARY 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	3.9	4.3	4.3	4.5	4.4	4.4	4.5	4.3	4.3	4.2	4.1	...
2	...	4.0	4.3	4.4	4.3	4.4	4.4	4.4	4.4	4.4	4.2	4.1	...
3	...	4.2	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.2	4.1	4.0	...
4	...	4.1	4.2	4.4	4.4	4.5	4.5	4.4	4.3	4.3	4.2	4.0	...
5	...	4.1	4.2	4.3	4.4	4.4	4.4	4.3	4.4	4.3	4.2	4.2	...
6	...	3.9	4.3	4.3	4.3	4.4	4.5	4.3	4.3	4.3	4.1	4.0	...
7	...	4.0	4.2	4.4	4.3	4.4	4.5	4.4	4.4	4.3	4.4	4.2	...
8	...	3.9	4.2	4.4	4.3	4.5	4.6	4.5	4.3	4.5	4.0	3.8	...
9	...	3.9	4.0	4.4	4.4	4.5	4.5	4.5	p4.4a	4.3	4.3	4.0	...
10	...	3.9	4.2	4.3	4.3	4.5	4.5	4.4	4.4	4.5	4.3	3.9	...
11	...	3.9	4.2	4.4	4.5	4.5	4.5	4.5	4.4	4.4	4.3	4.0	...
12	...	4.0	4.2	4.2	4.5	4.5	4.5	4.4	4.3	4.3	4.3	4.0	...
13	...	3.9	4.1	4.2	4.3	4.3	4.4	4.4	4.2	4.2	4.3	4.1	...
14	...	3.9	4.2	4.3	4.3	4.5	4.5	4.5	4.5	4.4	4.2	4.0	...
15	...	3.9	4.2	p4.3a	4.4	4.5	4.5	4.5	4.4	4.4	4.4	4.1	...
16	...	3.8	4.2	4.5	4.4	4.4	4.5	4.4	4.5	4.4	4.4	4.0	...
17	...	3.8	4.4	4.4	4.4	4.5	4.5	4.7	4.3	4.3	4.2	4.1	...
18	...	3.8	4.2	4.3	4.4	4.4	4.5	4.5	4.3	4.4	4.4	4.2	...
19	...	3.8	4.4	4.5	4.4	4.4	4.4	4.4	4.4	4.3	4.2	4.0	...
20	...	3.8	4.1	4.4	4.5	4.5	p4.5c	4.5	4.5	4.3	p4.2c	p4.0c	...
21	...	3.8	4.5	4.4	4.5	4.5	4.5	4.5	4.4	4.3	4.2	4.0	...
22	...	3.8	4.2	4.4	4.5	4.4	4.5	4.5	4.4	4.3	4.2	4.1	...
23	...	3.8	4.3	4.5	4.5	4.5	4.4	4.4	4.4	4.3	4.2	3.9	...
24	...	3.8	4.2	4.4	4.4	4.5	4.4	4.5	4.5	p4.4a	p4.3a	4.1	...
25	...	4.0	4.3	4.3	4.3	4.4	4.5	4.4	4.5	4.1	4.2	3.9	...
26	...	3.9	4.2	4.3	4.4	4.4	4.4	4.4	4.3	4.2	4.2	4.0	...
27	...	3.8	4.2	4.2	4.3	4.3	4.4	4.3	4.3	4.2	4.2	3.9	...
28	...	3.8	4.2	4.3	4.3	4.4	4.3	4.3	4.5	4.2	4.2	3.8	...
29	...	3.8	4.3	4.3	4.3	4.4	4.4	4.3	4.3	4.2	4.2	3.8	...
30													
31													
MEAN*	...	3.9	4.2	4.4	4.4	4.4	4.5	4.4	4.4	4.3	4.2	4.0	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	220	210	190	200	200	190	180	190	200	210	220	...
2	...	240	210	200	210	200	200	190	200	190	190	200	...
3	...	230	220	200	200	190	200	190	210	200	200	205	...
4	...	230	210	190	200	200	190	200	200	220	190	210	...
5	...	230	210	200	190	190	200	190	190	180	210	210	...
6	...	230	205	210	200	200	200	190	190	190	190	200	...
7	...	230	220	210	200	200	210	200	205	200	200	230	...
8	...	240	220	200	200	200	200	190	200	200	220	220	...
9	...	220	200	190	190	180	180	210	p190	200	210	220	...
10	...	220	210	210	200	190	190	200	190	200	200	225	...
11	...	220	210	200	195	195	190	195	200	205	200	230	...
12	...	230	200	200	190	200	200	205	200	200	200	230	...
13	...	230	200	200	200	190	200	190	190	190	190	240	...
14	...	220	210	210	200	200	200	200	200	200	200	220	...
15	...	220	200	p205a	205	200	200	200	200	190	220	p230	...
16	...	220	210	190	200	190	190	190	200	200	190	225	...
17	...	220	220	210	200	190	200	200	200	190	190	220	...
18	...	220	210	200	p200a	200	200	200	200	200	200	220	...
19	...	210	200	200	200	200	200	200	190	205	210	220	...
20	...	220	200	210	210	200	p210c	220	200	200	p210c	p220c	...
21	...	210	200	200	210	200	200	200	210	200	190	220	...
22	...	215	190	180	190	180	190	200	200	210	205	240	...
23	...	220	210	190	200	190	190	200	190	200	200	220	...
24	...	210	205	200	190	200	190	185	p200c	p200a	p210a	220	...
25	...	220	200	200	200	190	185	185	190	200	210	230	...
26	...	220	205	200	200	200	200	190	190	200	190	220	...
27	...	220	210	200	200	195	200	200	200	190	200	220	...
28	...	220	230	190	200	190	200	200	200	200	200	220	...
29	...	230	220	220	220	210	210	200	200	200	200	230	...
30													
31													
MEAN*	...	223	208	200	200	196	197	197	197	199	201	221	...

*=ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f°F2 EQUAL TO OR LESS THAN f°F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 298

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1944 FEBRUARY 1944

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.0	1.2	1.4	1.7	1.7	1.8	1.7	1.7	1.7	1.4	1.3	0.9	1.6	2.5	2.7	3.2	3.5	3.5	3.5	3.6	3.5	3.1	2.9	2.4	1.8
2	1.0	1.2	1.4	1.7	1.8	1.7	1.7	1.8	1.8	1.7	1.4	1.0	1.0	1.6	2.4	2.8	3.1	3.3	3.5	3.5	3.4	3.3	3.1	2.9	2.4	1.7
3	1.0	1.0	1.3	1.7	1.6	1.8	1.8	2.0	1.8	1.7	1.2	1.2	0.9	1.3	2.1	3.1	3.2	3.8	3.5	3.6	3.5	3.7	3.4	2.9	2.5	1.6
4	0.8	1.2	1.4	1.7	1.7	1.8	1.8	2.2	1.9	1.8	1.6	1.2	1.0	1.5	2.4	3.0	3.2	3.4	3.5	3.5	3.6	3.6	3.3	3.2	2.4	1.1
5	0.8	1.0	p1.2	1.4	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.2	1.0	1.4	2.0	p2.9	3.2	3.4	3.5	3.6	3.6	3.5	3.1	3.0	2.4	2.0
6	0.9	1.2	1.6	1.8	1.8	1.9	2.0	1.8	2.2	1.8	1.2	1.0	1.0	1.4	2.5	2.9	3.2	3.4	3.6	3.6	3.6	3.4	3.2	2.8	2.5	1.8
7	0.9	0.8	1.3	1.7	1.7	1.7	1.8	1.7	1.9	1.8	1.8	1.6	1.2	1.6	2.5	2.9	3.2	3.4	3.5	3.7	3.8	3.5	3.3	2.9	2.5	2.0
8	0.8	0.9	1.4	1.7	1.7	1.8	1.4	1.8	1.9	1.9	1.7	1.4	1.3	1.4	2.4	3.0	3.1	3.4	3.5	3.6	p3.5a	3.4	3.3	3.2	2.4	1.6
9	1.0	1.0	1.4	1.4	1.7	1.7	1.8	2.2	2.3	1.7	1.7	1.6	1.4	1.5	2.4	3.1	3.3	3.4	3.5	3.5	3.6	3.6	3.4	2.9	2.3	1.8
10	0.7	0.8	1.4	1.4	1.8	1.9	1.9	2.0	2.0	1.9	1.9	1.7	1.2	1.7	2.3	2.8	3.2	3.4	3.6	3.6	3.6	3.5	3.2	2.9	2.5	1.7
11	0.8	1.2	1.4	1.8	1.9	1.9	2.1	2.2	2.3	2.3	2.0	1.9	1.3	1.2	2.3	2.9	3.2	3.5	3.5	3.6	3.6	3.5	3.2	3.0	2.4	2.0
12	1.0	1.3	1.4	1.4	1.8	1.8	1.9	2.2	2.0	1.4	1.3	1.0	1.2	1.5	2.4	2.9	3.2	3.4	3.5	3.5	3.5	3.6	3.2	3.0	2.5	1.7
13	0.8	1.0	1.2	1.5	1.8	1.8	1.9	1.9	2.1	1.9	1.8	1.3	1.2	1.4	2.4	2.9	3.1	3.4	3.5	3.6	3.5	3.6	3.7	2.8	2.8	1.8
14	0.9	1.0	1.2	1.6	1.7	1.7	1.9	1.9	1.8	1.8	1.7	1.3	1.5	1.6	2.2	2.8	3.0	3.4	3.5	3.6	3.5	3.3	3.2	2.7	2.5	1.7
15	1.0	1.2	1.7	1.7	1.7	1.8	1.8	1.9	1.8	1.8	1.8	1.2	1.2	1.4	2.4	2.7	3.5	3.3	3.4	3.4	3.4	3.4	3.2	3.2	3.1	p2.2
16	1.0	1.2	1.2	1.3	1.8	1.8	1.8	1.8	1.8	1.7	1.4	1.2	1.2	1.5	2.5	2.9	3.1	3.3	3.5	3.6	3.6	3.4	3.2	2.9	2.6	1.8
17	1.0	1.4	1.7	1.9	1.7	1.8	1.8	1.8	1.7	1.7	1.2	1.2	1.0	1.6	2.5	3.0	3.2	3.4	3.4	3.5	3.6	3.6	3.1	2.8	2.7	1.7
18	1.0	1.3	1.8	1.8	1.7	1.8	1.9	1.9	1.8	1.8	1.5	1.3	1.0	1.4	2.4	2.9	3.3	p3.4	3.5	3.6	3.4	3.4	3.2	2.9	2.4	1.6
19	1.0	1.0	1.2	1.2	1.4	1.8	1.8	1.8	1.8	1.4	1.3	1.2	1.0	1.5	2.5	2.9	3.2	3.4	3.8	3.5	3.5	3.4	3.1	3.1	2.4	1.8
20	1.1	1.0	1.3	1.3	1.7	1.7	1.7	2.0	1.9	1.8	p1.5c	p1.2c	p1.0c	1.5	2.5	2.9	3.5	3.5	3.7	p3.7	3.8	3.5	3.4	p3.0c	p2.4c	p1.6c
21	1.0	1.2	1.2	2.0	1.8	2.0	2.0	2.2	p2.2c	1.9	1.7	1.2	1.0	1.4	2.5	2.8	3.3	3.2	3.6	p3.7c	p4.0c	3.7	3.3	2.8	2.4	1.5
22	0.8	1.0	1.2	1.3	1.8	1.9	2.1	2.2	2.1	1.8	1.8	1.7	1.0	1.4	2.7	2.8	3.1	3.5	3.5	3.6	3.8	3.4	3.3	3.2	2.8	1.6
23	1.0	1.0	1.4	1.7	1.8	1.9	2.1	2.4	2.2	2.0	1.9	1.4	1.0	1.4	2.4	2.9	3.2	3.4	3.5	3.6	3.5	3.5	3.4	3.2	2.3	1.6
24	0.9	1.0	1.2	1.8	1.8	1.9	2.0	2.0	1.8	1.8	p1.7a	1.6	1.0	1.4	2.3	2.8	3.2	3.4	3.6	3.6	3.5	p3.8c	p3.8c	p3.2a	2.4	1.6
25	1.0	1.1	1.2	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	1.1	1.0	1.4	2.3	2.8	3.2	3.4	3.6	3.6	3.6	3.6	3.4	3.1	2.4	1.2
26	1.0	1.0	1.2	2.0	1.8	2.0	2.0	1.8	1.8	1.8	1.7	1.3	0.9	1.4	2.4	3.1	3.2	3.4	3.5	3.5	3.4	3.4	3.1	2.8	2.4	1.6
27	0.8	1.0	1.1	1.2	1.3	1.7	1.8	1.9	1.7	1.7	1.7	1.0	0.9	1.5	2.4	2.9	3.1	3.3	3.6	3.6	3.5	3.4	3.1	2.8	2.4	1.7
28	1.0	1.2	1.5	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.4	1.2	1.0	1.4	2.4	3.0	3.1	3.7	3.5	3.5	3.5	3.3	3.2	2.8	2.0	1.6
29	1.0	1.2	2.1	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.6	1.3	1.2	1.4	2.4	2.9	3.2	3.3	3.4	3.4	3.4	3.3	3.0	2.8	2.2	1.4
30																										
31																										
MEAN*	0.9	1.1	1.4	1.6	1.7	1.8	1.9	2.0	1.9	1.8	1.6	1.3	1.1	1.5	2.4	2.9	3.2	3.4	3.5	3.6	3.6	3.5	3.3	3.0	2.5	1.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 299

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1944 | MARCH 1944

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.7	5.7	4.0	3.5	3.1	2.7	3.7	6.5	7.3	8.2	8.8	8.6	7.5	7.3	7.4	7.7	7.6	7.4	7.2	6.8	6.7	6.5	7.0	7.8	6.5
2	7.1	5.5	4.5	4.2	3.7f	p3.0f	3.6	6.6	6.9	7.3	p7.9a	8.5	9.0	8.5	7.4	6.9	6.6	6.8	7.2	7.1	6.6	6.5f	p6.6f	6.7f	6.4
3	p6.0f	p5.2f	4.4f	4.0	3.4	2.9	3.5	6.0	7.0	7.8	8.3	9.3	9.5	10.2	10.5	10.2	10.1	9.8	9.3	8.3	7.8	7.5	7.5	7.7	7.3
4	6.7	5.8	4.6	2.8f	2.2b	1.1b	3.9	6.1	7.6	7.5	7.6	9.5	p9.2c	9.0	p9.1c	p9.3c	p9.5c	p8.2c	p7.0c	6.8	6.6	6.7f	8.0f	8.2f	6.8
5	7.4	6.3	5.1	4.0	3.2	2.8	3.8	6.3	7.3	7.1	6.4	6.6	6.9	7.6	8.1	8.7	8.9	8.5	8.2	8.6	9.2	9.8	9.0	7.9	7.0
6	4.8	3.8	3.5	2.5	2.2	1.4b	3.7	6.3	7.8	8.5	8.7	8.8	8.4	8.7	8.9	9.5	9.8	10.3	9.9	9.6	9.4	8.8	p8.8f	8.7	7.2
7	8.4f	p7.4f	6.5f	5.8f	5.5f	4.3f	3.5	6.1	7.5	7.6	7.2	6.6	7.4	8.3	9.1	9.1	8.6	8.1	6.9	7.0	6.6	8.1	9.0	8.5	7.2
8	6.9	6.0	p5.6c	3.7f	3.1	2.5	3.5	6.2	7.6	7.6	7.2	7.8	8.0	8.3	8.3	9.0	9.9	10.2	9.6	9.0	8.0	7.5f	8.6f	8.3f	7.2
9	8.4f	6.3f	5.5f	4.1	3.8	2.7	3.9	6.6	7.7	7.8	7.5	7.3	7.8	8.4	8.8	10.1	10.5	10.1	9.9	9.2	8.7	8.6	10.9	7.9	7.6
10	6.6	5.9	5.5	4.1	2.3	2.1	3.7	6.5	7.7	7.9	8.0	8.0	8.4	8.0	7.6	8.2	8.7	8.9	8.5	8.4	8.3	7.7	7.6	7.5	6.9
11	6.8	6.9	5.7	4.8	3.8	2.4	3.9	6.8	8.4	8.0	7.1	7.0	7.0	7.3	7.7	9.0	9.8	9.6	9.5	9.4	8.8	8.3f	8.1f	7.5	7.2
12	6.3	5.7	4.5	2.8	1.7	1.0b	3.7	6.6	8.0	8.3	7.2	7.9	8.2	8.7	9.5	9.5	10.1	10.0	10.1	10.1	10.1	9.2	7.8	6.4	7.2
13	5.1	4.4	2.7	1.7b	1.3b	1.0b	3.8	6.7	8.2	8.6	8.3	7.6	8.2	8.3	8.1	8.2	8.7	8.8	9.3	9.2	8.3	8.3	7.9	7.7	6.7
14	7.2	7.4	6.7	5.5	4.6	3.9	4.2	6.7	7.9	8.5	7.6	7.2	7.1	7.2	7.9	8.4	8.8	8.9	9.1	8.9	8.4	7.6	8.5	8.3f	7.4
15	7.0f	7.2f	6.7	5.5	4.5f	4.2	4.5	6.6	7.9	9.3	9.2	9.2	8.2	8.2	8.6	9.1	9.5	9.6	9.0	9.0	9.2	9.5	7.9	7.3	7.8
16	5.6	5.1	4.8	4.1	3.6	3.2	4.2	6.6	7.5	8.6	9.2	9.4	8.3	8.3	8.2	6.1	8.1	8.0	8.2	8.2	8.8	8.7	8.3	7.7	7.1
17	7.0	6.6	4.9	2.7	1.4	1.0b	3.8	6.6	8.0	8.9	8.8	8.0	7.4	7.5	7.7	7.8	8.0	8.0	8.2	7.9	7.7	6.9	6.7	6.6f	6.6
18	6.0f	6.0	4.9	3.1	1.9	1.3	3.8	6.5	7.7	8.5	8.5	8.1	8.0	7.8	7.9	7.9	8.5	8.7	9.4	8.2	8.4f	p8.0f	p7.5f	p7.0f	6.8
19	6.6f	6.4f	4.8f	4.0f	3.8f	p2.4f	3.9	7.5	8.7	9.8	10.1	9.9	10.3	10.4	10.5	10.9	10.4	9.8	9.3	8.4	8.5	8.0	7.0	6.9f	7.8
20	6.0f	6.5	4.5	4.6	4.3	3.6	3.7	6.6	8.4	9.0	8.4	7.9	8.3	8.6	9.0	9.3	9.7	10.0	10.0	9.4	8.4	6.6	p7.3f	7.2f	7.4
21	6.6f	p6.6f	6.5	4.8	3.8	3.1	4.3	7.1	8.4	8.7	8.2	8.0	8.1	8.8	9.6	10.2	10.2	10.1	9.6	8.2f	p7.5f	6.8	6.5f	p6.3f	7.4
22	p6.0f	p5.7f	5.5	4.7	4.5f	4.3f	3.7	7.0	8.3	8.7	8.8	9.0	9.8	10.4	10.9	10.7	11.3	11.6	11.4	10.6	10.3	10.0	9.0f	9.0f	8.4
23	9.1	8.5	6.0	4.1	3.2	2.4	4.0	6.8	7.8	7.0	7.2	7.5	8.2	8.8	9.9	p10.9c	11.3	11.1	10.4	9.3	8.9	8.3f	8.4f	8.7	7.8
24	7.6f	6.7	5.1	2.6	1.4b	1.0b	3.9	6.9	7.7	7.1	6.6	7.0	7.8	8.4	9.3	10.2	10.8	10.6	10.6	9.4	8.9f	p8.9f	9.0f	8.9f	7.4
25	8.0	7.6	5.8	4.0	2.9	2.0	4.1	7.0	8.2	6.5	6.6	6.5	6.9	7.5	8.5	8.8	10.1	10.4	10.1	9.3	8.4	9.8	10.0	9.2	7.4
26	p8.4c	p7.8f	7.1f	4.5	3.1	2.9	4.4	7.2	8.7	9.3	9.0	8.3	7.9	8.3	8.4	9.0	9.8	9.9	10.1	9.3	8.0	p9.6f	11.1	10.7	8.0
27	8.6	8.5	7.5	6.6	5.6f	4.3f	5.9	p7.1c	p8.2c	9.4	8.0	7.5	7.6	8.8	9.6	10.0	9.9	10.0	10.0	8.9	8.6f	9.0	8.8	8.9	8.2
28	8.6	6.3	4.9	4.3	3.4	2.4	4.1	6.8	8.2	8.7	7.8	7.4	7.9	9.1	9.6	10.1	10.6	10.3	10.0	8.9	p8.6f	8.3f	8.3f	8.4f	7.6
29	7.9	5.6	3.8	3.5	3.4	p2.4f	4.1	7.5	9.0	9.3	8.0	7.0	7.6	8.6	9.1	9.5	9.1	9.3	8.9	7.9	p7.6f	7.3f	8.3f	9.0	7.2
30	8.0	7.0	5.0	4.8	4.5	4.0f	3.9	7.0	8.5	8.4	7.5	7.3	7.5	7.4	8.0	8.4	8.2	7.8	8.2	7.5	6.9	7.4	9.2	8.9	7.1
31	7.1	5.9	5.8	5.0	4.7	3.7	4.0	7.0	7.9	7.9	7.0	7.4	7.3	7.5	8.1	8.5	8.3	8.3	7.9	6.8	5.9	7.0	7.5	7.9	6.8
MEAN*	7.0	6.3	5.2	4.1	3.4	2.6	4.0	6.7	7.9	8.2	8.0	7.9	8.0	8.4	8.8	9.1	9.4	9.3	9.1	8.6	8.2	8.1	8.3	8.0	7.3

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 300

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1944 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — MARCH 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	210	220	240	260	275	250	250	280	310	330	350	380	370	370	340	315	300	260	270	280	230	240	230	282
2	220	230	230	250	270	300	240	250	280	300	320a	350	360	360	360	330	330	300	250	270	280	280	240	210	284
3	220	210	220	230	230	250	250	260	300	330	340	330	350	340	330	330	320	300	260	280	270	240	260	260	280
4	240	240	220	240	230b	290b	250	250	260	300	330	330	q350c	q350c	q340c	q330c	q340c	q330c	q260c	280	280	240	220	220	280
5	210	220	210	230	240	260	270	270	300	340	370	400	370	350	340	300	310	300	260	280	270	240	230	250	284
6	300	300	270	260	240	270b	270	260	290	320	340	360	340	350	335	310	300	280	260	370	300	250	250	290	296
7	300	290	q280f	280	260	280	260	280	310	340	370	335	350	340	335	320	310	230	270	280	270	250	240	280	294
8	260	240	220	240	250	250	250	260	300	360	350	350	340	330	330	320	300	280	270	300	340	290	290	310	293
9	280	280	250	230	230	240	260	270	290	330	330	350	340	320	335	300	290	280	250	270	280	290	300	320	288
10	310	290	250	220	250	270	250	260	300	340	320	330	350	360	350	320	310	280	250	280	300	270	230	260	290
11	240	220	220	240	220	240	260	260	290	320	340	370	360	350	330	310	270	270	260	290	300	280	250	270	282
12	280	230	210	230	230	280b	250	250	290	330	325	340	340	300	300	300	290	280	250	265	240	235	250	245	272
13	230	230	240	250b	260b	280b	250	250	280	315	330	345	340	320	320	320	300	250	250	270	300	290	280	310	284
14	290	260	240	250	250	230	250	250	305	310	340	370	350	320	325	330	285	250	260	290	290	285	320	270	288
15	260	240	240	250	240	240	240	250	285	310	330	340	360	340	320	310	300	240	260	280	270	240	220	220	274
16	320	270	310	310	260	230	250	240	280	310	310	340	330	340	350	300	300	250	260	290	260	230	220	210	282
17	220	210	220	220	245	290b	250	250	290	310	340	350	360	350	330	370	290	280	270	290	280	280	280	280	286
18	260	230	210	230	240	270	260	260	300	320	340	360	350	330	360	325	280	270	270	340	360	370	360	290	299
19	220	220	250	270	300	300	270	280	290	330	310	330	320	330	330	310	310	400	280	330	290	280	330	260	298
20	300	230	250	240	230	280	280	280	290	310	330	350	320	320	340	300	300	250	270	280	300	310	250	270	287
21	280	240	210	240	250	250	260	280	310	320	350	330	340	320	310	310	280	250	275	290	230	250	290	255	280
22	270	245	260	280	280	270	260	270	270	300	320	330	330	320	305	310	280	250	260	300	280	270	270	240	282
23	250	220	220	240	240	240	260	270	300	320	350	340	320	325	315	290	280	280	270	300	280	280	220	230	277
24	240	220	210	210	240b	270b	250	270	300	330	350	350	330	320	300	280	280	280	260	310	300	310	240	250	279
25	240	220	210	230	220	240	250	250	280	310	340	400	340	320	320	290	270	240	260	280	280	240	215	240	270
26	280	240	200	230	260	280	250	240	270	290	320	330	320	315	280	290	270	240	260	380	380	280	250	290	281
27	310	250	240	260	290	230	240	q260c	q280c	300	320	330	330	320	280	280	270	250	270	330	340	210	240	200	276
28	220	205	230	230	210	240	240	240	270	360	320	340	345	310	310	300	275	240	260	330	260	240	210	220	267
29	200	210	230	260	330	310	260	250	290	310	310	345	350	310	290	290	280	260	280	330	310	230	210	220	278
30	220	200	220	250	280	260	250	260	280	320	330	340	350	330	325	300	270	240	260	330	280	220	200	210	272
31	220	220	220	220	220	220	250	240	280	320	335	335	340	340	325	285	300	210	270	340	310	250	230	210	270
MEAN*	255	236	233	244	250	262	254	258	288	320	334	347	344	332	325	310	294	270	263	301	291	263	253	252	282

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 301

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1944

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	3.8	4.2	4.3	4.3	4.5	4.5	4.4	4.3	4.2	4.2	4.1	...
2	...	3.9	4.3	4.3	p4.3a	4.4	4.4	4.4	4.3	4.2	4.0	4.0	...
3	...	4.0	4.1	4.5	4.4	4.4	4.3	4.5	4.4	4.4	4.2	3.9	...
4	...	3.8	4.3	4.3	4.4	4.5	p4.5c	p4.4c	p4.4c	p4.3c	p4.1c	p4.0c	...
5	...	3.9	4.2	4.3	4.4	4.5	4.5	4.4	4.4	4.3	4.1	4.1	...
6	...	3.9	4.3	4.4	4.4	4.5	4.5	4.3	4.3	4.2	4.1	4.1	...
7	...	3.8	4.2	4.4	4.4	4.5	4.6	4.4	4.4	p4.3	3.9	...	...
8	...	3.9	4.2	4.4	4.4	4.5	4.5	4.4	4.4	4.4	4.1	4.0	...
9	...	4.0	4.1	4.4	4.3	4.6	4.5	4.5	4.4	4.2	4.0	4.0	...
10	...	3.8	4.2	4.3	4.5	4.5	4.6	4.5	4.5	4.3	4.2	4.0	...
11	...	3.8	4.2	4.3	4.5	4.5	4.6	4.5	4.5	4.3	4.1	4.1	...
12	...	3.7	4.2	4.4	4.4	4.5	4.5	4.5	4.4	4.2	4.1	3.9	...
13	...	3.8	4.2	4.5	4.5	4.6	4.5	4.5	4.4	4.5	4.2	...	...
14	...	4.0	4.3	4.4	4.5	4.6	4.6	4.5	4.4	4.6	4.2	...	...
15	...	3.8	4.4	4.4	4.6	4.6	4.7	4.5	4.5	4.2	4.3	...	...
16	...	3.8	4.3	4.4	4.5	4.6	4.5	4.5	4.5	4.2	4.2	...	...
17	...	3.8	4.3	4.5	4.6	4.6	4.7	4.6	4.5	4.5	4.4	4.2	...
18	...	4.0	4.4	4.5	4.7	4.6	4.6	4.5	4.7	4.5	4.3	4.1	...
19	...	4.2	4.3	4.8	4.5	4.5	4.5	4.6	4.5	4.4	4.3	...	...
20	...	4.0	4.2	4.5	4.6	4.6	4.6	4.6	4.4	4.5	4.2	...	...
21	...	4.0	4.3	4.6	4.6	4.7	4.7	4.6	4.5	4.4	4.1	...	...
22	...	4.1	4.2	4.5	4.6	4.7	4.7	4.7	4.5	4.5	4.2	...	...
23	...	4.2	4.4	4.5	4.7	4.7	4.8	4.6	4.6	4.5	4.4	4.2	...
24	...	4.2	4.3	4.7	4.8	4.8	4.6	4.7	4.5	4.4	4.2	4.0	...
25	...	4.0	4.3	4.5	4.7	4.8	4.7	4.7	4.6	4.5	4.3	...	...
26	...	4.0	4.4	4.5	4.5	4.7	4.7	4.6	4.3	4.3	4.2	...	...
27	...	p4.0c	p4.4c	4.5	4.6	4.6	4.7	4.5	4.4	4.4	3.8	...	...
28	...	3.9	4.5	4.6	4.6	4.6	4.7	4.5	4.5	4.2	4.1	...	...
29	...	3.8	4.2	4.5	4.5	4.8	4.6	4.5	4.4	4.4	4.2	...	...
30	...	3.8	4.3	4.5	4.6	4.6	4.6	4.5	4.5	4.4	4.0	...	...
31	...	4.0	4.2	4.6	4.5	4.5	4.5	4.5	4.4	4.3	4.1	...	...
* MEAN	...	3.9	4.3	4.5	4.5	4.6	4.6	4.5	4.4	4.4	4.2	4.0	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	220	200	230	210	210	215	210	210	200	230	...
2	...	230	220	215	p210a	210	210	210	200	200	190	240	...
3	...	220	220	205	220	210	210	215	p210a	p215a	p220a	p230a	...
4	...	240	230	215	210	215	p210c	p210c	p220c	p215c	p215c	p235c	...
5	...	230	220	210	210	200	205	210	230	215	210	240	...
6	...	230	220	230	215	210	210	210	215	205	215	240	...
7	...	230	220	200	210	210	210	p210a	p215a	p215	220	...	...
8	...	230	230	220	210	210	210	210	210	220	220	230	...
9	...	240	225	220	220	270	210	210	215	205	210	240	...
10	...	230	220	215	220	220	220	210	205	205	200	235	...
11	...	230	220	215	215	215	200	210	200	220	210	235	...
12	...	235	220	220	210	210	210	210	205	200	230	235	...
13	...	230	220	220	215	210	210	210	200	200	200	...	...
14	...	235	220	210	215	210	210	200	190	200	205	...	...
15	...	230	220	220	220	210	210	210	200	200	220	...	...
16	...	225	220	220	210	210	210	200	200	190	200	...	...
17	...	230	230	210	210	210	205	205	200	200	210	230	...
18	...	240	220	220	210	200	200	205	200	200	200	220	...
19	...	240	220	220	220	210	210	210	210	200	220	...	...
20	...	250	230	220	210	200	200	190	200	200	230	...	...
21	...	220	220	220	210	200	210	200	200	200	215	...	...
22	...	240	210	220	220	215	210	210	215	210	215	...	...
23	...	240	220	210	210	200	200	200	210	210	215	235	...
24	...	230	220	200	190	190	200	195	200	190	200	240	...
25	...	220	215	210	195	185	185	200	200	200	215	...	...
26	...	235	220	210	200	200	200	200	200	230	220	...	...
27	...	p230c	p220c	215	210	200	200	200	195	200	200	...	...
28	...	220	220	210	200	200	200	200	190	195	220	...	...
29	...	225	220	210	210	200	205	205	205	200	240	...	...
30	...	235	220	210	200	205	190	200	190	190	210	...	...
31	...	220	220	215	200	210	200	205	200	200	200	...	...
* MEAN	...	231	221	214	211	206	205	206	205	205	212	234	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 302

MARCH 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1944

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECO
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.9	1.2	1.3	1.6	1.8	1.9	1.8	1.8	1.9	1.7	1.4	1.2	1.0
2	0.9	1.2	1.4	1.7	1.8	1.7	1.8	1.9	1.8	1.8	1.4	1.2	1.1
3	1.0	1.0	1.1	1.4	1.8	1.8	2.0	1.8	1.8	1.8	1.4	1.2	1.0
4	1.0	1.2	1.8	1.8	1.7	2.0	p1.9c	p1.8c	p1.8c	p1.8c	p1.4c	p1.2c	p1.3c
5	0.8	1.0	1.2	1.4	1.8	2.0	1.8	1.9	1.9	1.8	1.4	1.2	1.0
6	1.0	1.2	1.8	1.7	1.8	1.9	1.8	2.0	1.8	2.1	1.7	1.2	1.0
7	1.0	1.0	1.2	1.3	p1.8	2.0	2.0	2.0	2.0	1.4	1.3	1.2	1.0
8	0.8	1.0	1.2	1.4	1.8	1.7	1.9	1.7	1.8	1.7	1.5	1.2	1.0
9	1.0	1.2	1.4	1.6	1.8	1.8	2.0	2.2	2.0	1.8	1.2	1.2	1.0
10	1.0	1.2	1.2	1.4	1.8	2.0	1.9	1.8	1.8	1.4	1.4	1.2	1.0
11	1.0	1.0	1.2	1.4	1.7	1.8	1.9	1.9	1.9	1.8	1.2	1.4	1.0
12	1.0	1.2	1.2	1.4	1.8	1.8	2.1	2.0	2.4	1.9	1.6	1.2	1.0
13	1.0	1.3	1.4	1.8	2.0	2.1	2.0	2.0	1.9	1.8	1.4	1.0	1.0
14	1.0	1.2	1.2	1.4	1.8	1.8	1.8	2.0	1.9	1.8	1.4	1.3	1.0
15	1.0	1.3	1.4	1.8	1.8	2.0	1.7	p1.8c	1.9	1.8	1.6	1.2	1.1
16	p1.0c	1.3	1.7	1.5	1.8	1.9	2.0	1.8	1.8	1.4	1.4	1.3	1.1
17	1.0	1.3	1.4	1.4	1.9	2.0	1.8	2.0	1.9	1.4	1.4	1.2	1.0
18	1.0	1.2	1.3	1.4	2.0	2.2	2.0	2.2	2.0	2.0	1.4	1.3	1.0
19	0.8	1.2	1.4	p1.7c	1.9	2.0	2.0	2.1	2.1	1.9	1.4	1.2	1.0
20	1.0	1.2	1.4	1.4	1.8	2.0	2.0	2.3	2.0	2.0	1.4	1.3	1.0
21	1.2	1.2	1.3	1.4	1.9	2.1	2.1	2.2	2.0	2.0	1.4	1.2	1.0
22	1.0	1.0	1.2	1.4	2.0	2.3	2.2	2.4	2.3	2.0	1.8	1.2	1.0
23	1.0	1.0	1.3	1.4	2.0	2.2	2.0	2.2	2.3	2.2	1.4	1.2	1.0
24	1.0	1.0	1.3	1.4	2.0	2.2	2.2	2.0	2.2	1.9	1.2	1.2	1.0
25	1.0	1.0	1.3	p1.7c	p2.1c	p2.1c	2.2	2.2	2.3	p2.2c	2.0	1.4	1.1
26	1.0	1.2	1.3	1.3	1.8	2.0	2.1	2.1	2.1	1.9	1.9	1.2	0.8
27	1.1	p1.2c	p1.2c	1.4	1.7	1.9	2.0	2.1	2.2	1.4	1.4	1.0	1.0
28	1.0	1.0	1.2	1.4	1.7	2.0	2.0	2.1	2.1	2.1	1.9	1.4	1.0
29	1.0	1.0	1.2	1.4	1.8	p2.2	2.3	2.1	2.1	1.8	1.4	1.2	0.8
30	1.0	1.0	1.2	1.8	1.8	1.8	1.9	2.2	2.0	1.4	1.4	1.2	1.0
31	1.0	1.2	1.2	1.4	1.4	2.2	2.0	2.0	2.0	1.8	1.4	1.3	1.0
*MEAN	1.0	1.1	1.3	1.5	1.8	2.0	2.0	2.0	2.0	1.8	1.4	1.2	1.0

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.4	2.2	2.8	3.2	3.7	3.5	3.4	3.6	3.4	3.2	2.6	2.4a	1.6
2	1.3	2.3	2.8	3.2	p3.4a	3.5	3.5	3.5	3.4	3.1	2.8	2.8	1.6
3	1.2	2.4	3.0	3.2	3.6	3.5	3.6	3.6	3.6a	p3.2a	p2.7a	2.3a	1.6
4	1.4	2.4	3.0	3.2	3.4	3.5	p3.6c	p3.5c	p3.5c	p3.2c	p2.7c	p2.4c	p1.8c
5	1.4	2.3	2.8	3.1	3.3	3.6	3.5	3.4	3.5	3.2	2.6	2.6	1.4
6	1.2	2.4	2.9	3.2	3.4	3.5	3.5	3.6	3.4	3.4	2.9	2.5	1.6
7	1.4	2.2	2.8	3.1	3.4	3.4	3.5	3.5a	3.8a	p3.2	2.7	2.3	1.2
8	1.2	2.4	2.8	3.2	3.3	3.5	3.5	3.4	3.4	3.2	3.2	2.4	1.6
9	1.2	2.4	2.8	3.2	3.4	3.4	3.6	3.5	3.3	3.2	2.9	2.4	1.9
10	1.3	2.3	2.8	3.0	3.4	3.5	3.4	3.3	3.3	3.1	p2.8	p2.2	1.4
11	1.4	2.3	2.8	3.2	3.3	3.5	3.6	3.5	3.5	3.2	2.8	2.4	1.5
12	1.2	2.3	2.8	3.1	3.4	3.5	3.6	3.5	3.4	3.2	2.8	2.4	1.4
13	1.4	2.4	3.0	3.1	3.4	3.4	3.6	3.5	3.3	3.0	2.8	2.5	1.7
14	1.4	2.4	2.8	3.1	3.4	3.5	3.6	3.6	3.4	3.2	2.8	2.2	1.6
15	1.4	2.4	2.8	3.2	3.4	3.4	3.6	3.6	3.4	3.2	3.0	2.1	1.6
16	1.3	2.4	2.8	3.2	3.4	3.5	3.5	3.5	3.4	3.1	2.8	2.4	1.7
17	1.4	2.4	2.9	3.2	3.5	3.6	3.6	3.6	3.5	3.3	2.9	2.4	1.4
18	1.0	2.2	2.9	3.2	3.5	3.6	3.6	3.6	3.5	3.2	2.8	2.3	1.3
19	1.4	2.3	2.8	3.2	3.4	3.5	3.6	3.6	3.5	3.0	2.8	2.5	1.3
20	1.4	2.4	2.9	3.2	3.4	3.6	3.6	3.6	3.5	3.2	3.2	2.4	1.1
21	1.4	2.3	2.8	3.2	3.5	3.6	3.6	3.6	3.5	3.4	2.8	2.4	1.2
22	1.4	2.4	2.8	3.2	3.4	3.7	3.8	3.7	3.8	3.1	2.8	2.3	1.4
23	1.3	2.3	2.7	3.2	3.5	3.7	3.6	3.6	3.5	3.2	2.8	2.2	1.4
24	1.4	2.3	2.9	3.2	3.4	3.6	3.7	3.6	3.4	3.1	2.7	2.2	1.0
25	1.4	2.3	2.8	3.6	3.4	3.7	3.7	3.7	3.6	3.6	3.2	2.2	1.1
26	1.4	2.6	3.2	3.2	3.4	3.5	3.6	3.6	3.5	3.4	3.0	2.2	1.3
27	1.3	p2.4c	p3.0c	3.0	3.4	3.5	3.5	3.5	3.4	3.1	2.7	2.2	1.2
28	1.2	2.3	2.8	3.2	3.4	3.4	3.5	3.4	3.5	3.1	2.7	2.2	1.2
29	1.3	2.2	2.8	3.0	3.4	3.4	3.6	3.6	3.3	3.0	3.3	2.8	1.7
30	1.4	2.3	2.8	3.1	3.4	3.4	3.5	3.4	3.3	3.0	2.8	2.3	1.1
31	1.2	2.3	2.8	3.1	3.4	3.6	3.5	3.4	3.3	3.1	2.5	2.8	1.4
*MEAN	1.3	2.3	2.8	3.2	3.4	3.5	3.6	3.5	3.4	3.2	2.8	2.4	1.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 303

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1944 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND APRIL 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.8	6.1	3.4	2.8	2.4	p2.0c	p3.8c	p6.4c	7.8	8.4	8.0	7.1	7.4	7.8	8.3	8.1	7.6	8.0	7.9	7.4	7.8	p7.7f	7.7	8.0	6.7
2	8.3f	6.0f	2.7	p2.4b	p2.1b	1.8	3.5	5.3	7.7	10.1	9.2	8.6	7.1	7.4	8.3	9.1	10.3	p9.9	9.5	8.8	8.5	8.8	9.0	p7.5f	7.2
3	6.6f	6.4f	6.0f	4.8f	4.2f	p3.5f	3.6f	6.5	7.8	8.0	7.4	7.2	7.2	7.3	7.8	8.2	8.2	7.7	7.3	6.5	6.8	6.9	7.3	7.2	6.7
4	7.2	7.2	6.2	5.8	p4.4f	3.8	4.6f	6.5	8.2	9.2	9.0	7.3	7.0	7.3	8.2	8.7	8.2	7.5	7.0	7.0	7.0	7.0	p7.2f	p7.4f	7.0
5	7.7f	7.0	6.5	5.5	5.4	p4.3f	5.4f	6.8	8.1	9.3	9.1	7.8	6.9	7.9	8.9	9.1	8.6	7.9	7.8	7.0	7.0	7.2	7.5	8.0	7.4
6	7.1	7.1	6.8	5.4	3.9	2.5	4.2	6.5	7.7	8.6	8.9	7.8	7.3	8.2	9.0	9.8	9.1	9.1	9.0	7.6	7.5	7.7	7.4f	7.1	7.3
7	7.7	7.8	6.4	3.8f	3.5f	p3.0f	4.1	6.5	7.8	7.3	6.7	7.0	7.9	8.3	7.8	8.6	8.5	8.5	7.8	7.7	8.0	8.2	7.3	6.6	7.0
8	6.2	5.7	3.4	2.8	2.6	2.4	3.4	6.6	7.9	7.8	7.6	6.9	7.0	7.6	7.7	7.8	8.4	8.7	9.2	8.4	8.2c	p8.1f	7.8f	7.7f	6.7
9	7.9	7.5	6.3	5.4	3.8	2.5	3.9	6.7	7.7	7.2	6.3	5.6	5.8	6.9	7.2	7.8	p8.4a	8.6	8.8	8.4	8.4	8.3	8.2	7.4	6.9
10	5.3	4.4	3.6	2.1	1.8	1.6	3.9	7.0	8.4	8.7	7.8	6.9	7.3	7.3	7.8	8.3	8.4	8.2	8.0	7.3	7.2	7.0	7.3	7.4	6.4
11	6.6	5.0	3.8	2.8	2.1	1.5	3.8	6.3	7.9	8.5	8.6	7.4	6.7	7.5	7.9	8.4	8.6	9.2	9.0	8.2	8.2	8.3	9.1	8.4	6.8
12	7.2	6.3	4.4	2.6	1.8	1.3	3.8	6.6	7.9	8.6	8.9	7.7	7.1	6.9	7.4	p7.9	8.2	8.3	8.3	7.9	7.5	7.8	7.9	5.8	6.6
13	5.7	p6.6	5.0	3.4	2.2	1.8	3.7	6.5	7.9	8.5	7.9	6.9	6.7	7.2	8.1	8.2	8.4	7.7	7.4	6.8	6.3	6.7	7.4	6.6	6.4
14	5.8f	5.7f	5.5f	3.8	3.2	2.8f	3.8	6.5	p7.7c	8.9	8.6	7.2	6.3	6.9	7.5	7.7	8.1	8.3	7.8	6.6	6.1	6.9	p7.2f	6.8	6.5
15	7.0	5.9	3.4	p2.5c	p2.4c	1.4	3.8	6.7	7.8	8.3	7.9	7.2	7.0	6.9	7.7	7.8	7.7	7.4	7.5	7.5	7.8	7.4	7.6	p7.2f	6.4
16	p6.8f	p6.4f	6.0	5.0	4.5	3.9	4.2	6.5c	p6.6c	7.7	8.3	8.8	9.0	7.8	8.0	8.4	9.2	8.5	8.8	7.7	7.4	7.9	8.3	7.5	7.2
17	7.4	8.3	6.5	4.7	4.1	3.3	4.5	6.8	8.1	9.0	8.8	8.3	7.9	8.6	8.6	9.6	9.8	9.5	9.0	8.0	7.8	8.5	8.1	7.1	7.6
18	6.9	6.0	3.5	2.7	2.7	2.5	3.4	6.2	7.5	8.0	7.4	6.6	6.7	7.2	8.0	8.9	9.0	8.4	6.9	5.4	6.7	p7.3f	p7.5f	p6.2f	6.3
19	5.7	5.4	4.5	3.4	2.9	2.6	3.8	6.1	7.2	7.3	6.7	6.8	7.1	8.0	8.1	9.2	9.3	8.9	8.0	7.0	6.6	7.2	7.5	6.4	6.5
20	6.0	5.6	5.0	4.4	4.0	p3.4c	3.6	5.7	7.2	7.8	7.3	7.1	7.2	7.8	8.6	9.3c	9.4	8.8	8.9	5.9	p6.0f	p6.3f	6.6f	p5.7f	6.6
21	4.8f	5.4f	4.9f	4.0c	3.2c	p2.8c	3.8	5.2	6.2	6.9	7.2	7.3	7.2	7.5	8.3	9.2	9.0	9.0	8.2	7.2	7.2	p7.3f	p7.4f	p7.5f	6.5
22	6.1	5.0f	4.6f	4.1	3.0	2.3	3.5	5.7	6.3	6.2	6.1	5.8	6.2	6.7	7.2	8.0	8.7	8.0	7.5	6.2	5.5	p6.1f	p5.9f	p6.2f	5.9
23	6.4f	6.6f	5.5	4.2	2.5	1.5	2.7c	p5.0c	6.2c	6.1c	5.9c	6.3c	p6.5c	p7.0c	p7.5c	8.0	8.2	8.0	p6.8c	5.1c	p6.2c	7.3f	7.0f	6.6	6.0
24	6.2	5.2	4.6	4.1	2.4	2.9	3.2	6.2	7.4	7.6	6.6	6.8	6.7	7.0	8.1	8.3	8.6	8.9	7.9	7.2	7.1	7.3	6.8	7.0	6.4
25	6.4	4.8	4.0	2.9	1.9	1.5	3.4	6.5	8.0	8.7	8.7	7.9	7.0	7.0	6.9	7.8	7.8	7.9	7.9	7.5	8.3f	p7.5f	6.7f	5.8	6.4
26	4.7	4.0	3.4	3.2	3.3	2.6	3.5	5.9	7.1	7.5	6.8	6.5	6.5	6.8	7.4	7.9	8.3	8.0	7.4	5.8	6.5	5.9	6.6	6.5	5.9
27	6.4	5.4	4.8	4.3	3.3	2.7	3.7	6.1	7.3	8.3	8.2	6.5	5.8	6.2	6.4	7.1	7.8	7.9	7.7	7.1	6.5	6.6	6.8	6.5	6.2
28	6.1	5.2	5.0f	4.8f	4.5f	p4.2c	p5.3c	6.0	7.0	7.7	7.3	6.1	5.9	5.9	6.0	6.6	7.0	7.8	7.2	6.3	6.6	6.8	5.9	3.6	6.0
29	3.2	2.8	2.8f	p2.6f	p2.3f	p2.2f	3.5	5.6	7.0	7.7	7.5	7.0	6.4	6.2	6.3	6.6	6.2	6.1	p6.3a	5.9	p6.2c	6.6	6.8	5.1	5.4
30	4.8	4.3	4.2	4.0f	3.7f	3.0f	3.2	6.0	7.4	7.6	6.6	6.4	6.3	6.1	6.5	6.8	7.1	7.3	6.8	6.4	5.8	6.1	6.7	6.5c	5.8
31																									
MEAN*	6.4	5.8	4.8	3.8	3.1	2.6	3.8	6.2	7.5	8.0	7.7	7.1	6.9	7.2	7.7	8.2	8.4	8.3	7.9	7.1	7.1	7.3	7.4	6.8	6.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 304

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1944 APRIL 1944

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	210	240	250	240	q250c	q270c	q280c	300	310	330	340	350	340	310	300	290	280	280	320	270	270	210	220	278
2	220f	200f	220	250b	q250b	260	250	250	300	300	310	310	340	330	300	300	260	270	250	290	270	240	260	350	274
3	410	380	320	300	320	280	250	260	280	300	310	330	360	350	310	300	280	240	280	280	260	250	210	200	294
4	230	220	230	220	230	230	250	260	280	300	210	330	350	320	310	300	280	240	250	280	270	230	240	250	263
5	230	220	210	230	230	240	240	250	270	290	310	340	350	330	310	280	300	230	260	280	280	230	210	210	264
6	220	220	230	220	210	230	230	250	300	300	310	310	340	320	300	270	290	230	260	280	260	250	240	220	262
7	220	210	210	200	220	220	240	250	270	320	360	350	310	300	320	300	300	240	260	270	240	215	220	220	261
8	210	220	230	240	240	240	240	270	260	300	360	350	340	310	300	310	290	220	260	280	300	290	210	230	271
9	210	220	220	210	220	230	240	250	280	350	360	380	440	340	310	290	290	230	280	270	240	220	200	210	270
10	220	210	230	240	260	260	240	240	280	310	340	330	340	340	310	300	290	240	280	320	290	240	230	210	273
11	210	210	220	220	220	240	240	240	260	300	330	330	360	330	290	300	280	270	260	280	260	250	210	210	263
12	210	210	210	230	230	260	240	250	260	300	310	330	350	350	310	280	240	230	240	270	220	220	200	200	256
13	210	q210	210	210	230	240	250	250	280	300	315	320	370	370	320	310	280	230	250	280	260	250	230	220	266
14	210	210	210	230	230	250	230	240	q260c	280	310	350	400	360	340	300	290	230	240	310	330	270	210	210	271
15	200	210	200	q230c	q230c	260	240	250	260	300	330	340	370	330	330	320	290	280	260	270	230	230	250	250	269
16	250	240	260	270	240	230	220	250	250	280	300	330	350	330	330	310	280	230	230	260	250	230	230	220	265
17	220	210	210	230	240	230	250	240	290	300	300	330	340	330	310	300	290	230	260	280	250	230	220	210	262
18	210	210	220	240	240	270	270	260	300	320	330	340	400	360	320	280	280	240	280	390	360	300	210	210	285
19	220	220	210	220	240	250	260	260	290	330	330	350	350	320	300	310	280	230	270	280	290	250	230	240	272
20	230	220	230	240	240	q210	280	270	290	310	320	330	340	320	320	300	280	230	290	290	320	290	230	260	277
21	250	240	230	240	240	260b	260	280	300	310	320	340	340	350	320	290	270	240	270	320	330	q290f	q250f	210	281
22	210	230f	230f	220	230	230	250	220	310	340	360	400	380	350	340	300	280	240	270	320	330	310	270	240	286
23	230f	210	210	200	220	250	250	q300f	350	370	370	380	360	350	340	300	290	240	280	330	q330c	330	270	220	291
24	220	210	230	240	240	280	250	260	290	300	320	370	350	330	300	300	285	230	270	300	280	250	230	220	273
25	220	220	210	220	240	270	200	250	280	290	320	360	340	340	350	300	300a	240	260	260	250	260	230	230	268
26	240	225	230	230	235	240	250	260	300	310	340	380	390	330	310	300	285	270	290	390	240	240	220	210	280
27	200	210	220	230	240	250	240	260	290	320	350	360	420	400	340	320	280	250	310	290	280	280	280	230	285
28	240	270	260	230	240	230	235	q255c	q280c	300	360	360	430	400	370	350	290	280	260	280	260	220	200	220	284
29	230	260	280	310	290	320	240	260	285	300	340	380	380	410	390	340	320	240	280	250	q240c	220	210	210	291
30	210	270	300	290	270	280	240	250	300	320	330	360	360	350	370	315	300	240	270	330	270	240	220	210	287
31																									
MEAN*	227	227	231	236	240	250	245	256	285	309	326	347	363	343	323	302	285	243	267	295	275	253	228	225	274

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 305

APRIL 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1944

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	p4.0c	4.2	4.4	4.6	4.5	4.4	4.4	4.3	4.1	4.3	...	...
2	...	...	4.4	4.3	4.4	4.4	4.5	4.5	4.3	4.4	4.0	4.0	...
3	...	4.0	4.3	4.3	4.4	4.5	4.6	4.5	4.4	4.4	4.2	...	...
4	...	4.1	4.2	4.5	4.5	4.5	4.5	4.3	4.4	4.2	4.2	...	...
5	...	4.1	4.3	4.5	4.5	4.5	4.6	4.5	4.4	4.3	4.2	...	...
6	...	4.1	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.2	...	...
7	...	4.0	4.2	4.4	4.4	4.5	4.5	4.5	4.5	4.4	4.4	...	...
8	...	4.3	4.3	4.4	4.4	4.5	4.4	4.3	4.3	4.5	4.2	...	...
9	...	4.2	4.3	4.4	4.5	4.4	4.4	4.3	4.3	4.3	4.3	...	...
10	...	3.9	4.3	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.2	...	...
11	...	3.9	4.3	4.5	4.5	4.5	4.6	4.6	4.3	4.4	4.2	4.0	...
12	...	3.9	4.3	4.5	4.5	4.5	4.5	4.6	4.4	4.3	4.2	...	...
13	...	4.0	4.3	4.4	4.5	4.6	4.7	4.5	4.4	4.3	4.1	...	...
14	...	3.9	p4.2	4.3	4.5	4.6	4.6	4.5	4.5	4.4	4.3	...	...
15	...	4.0	4.2	4.5	4.6	4.6	4.6	4.5	4.4	4.3	4.3	4.0	...
16	...	3.9	4.3	4.3	4.5	4.8	4.7	4.6	4.5	4.5	3.9	...	...
17	...	3.8	4.3	4.5	4.5	4.6	4.6	4.5	4.4	4.3	4.2	...	...
18	...	3.8	4.4	4.5	4.5	4.5	4.6	4.6	4.4	4.2	4.0	...	...
19	...	3.8	4.3	4.4	4.4	4.5	4.6	4.5	4.3	4.4	4.2	...	...
20	...	3.9	4.3	4.3	4.4	4.5	4.5	4.5	4.4	4.2	4.0	...	...
21	...	3.8	4.3	4.3	4.4	4.5	4.6	4.5	4.4	4.2	3.9	...	...
22	...	...	4.2	4.3	4.4	4.5	4.5	4.5	4.5	4.3	4.0	...	...
23	...	...	4.3	4.3	4.4	4.5	4.5	4.4	4.3	4.2	4.2	...	...
24	...	3.9	3.9	4.4	4.4	4.5	4.6	4.5	4.4	4.4	4.3	...	...
25	...	3.9	4.2	4.2	4.4	4.4	4.3	4.4	4.3	4.0	4.0	...	...
26	...	3.9	4.2	4.2	4.3	4.4	4.4	4.3	4.3	4.2	4.0	3.7	...
27	...	3.9	4.2	4.2	4.3	4.3	4.4	4.2	4.1	4.1	3.9	...	...
28	...	p3.9c	p4.2c	4.2	4.3	4.3	4.4	4.3	4.3	4.2	3.9	3.8	...
29	...	3.8	4.2	4.3	4.3	4.4	4.4	4.4	4.4	4.4	4.2	4.2	...
30	...	4.0	4.3	4.2	4.4	4.4	4.4	4.3	4.4	4.2	4.0	...	...
31													
* MEAN	...	4.0	4.3	4.4	4.4	4.5	4.5	4.5	4.4	4.3	4.1	4.0	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	p230c	230	220	210	205	200	200	200	200	190	...	...
2	...	240	220	230	220	210	210	205	205	200	200	240	...
3	...	220	220	210	210	200	200	205	200	200	200	...	...
4	...	210	220	220	220	210	210	200	190	200	200	...	...
5	...	220	220	220	205	200	200	200	200	190	200	...	...
6	...	225	220	220	200	200	200	200	200	210	210	...	...
7	...	220	210	210	205	200	200	200	200	200	210	...	...
8	...	220	220	210	200	200	200	200	200	180	220	...	...
9	...	220	210	210	200	200	180	190	195	195	p215a	...	...
10	...	230	225	220	205	200	190	200	200	200	210	...	...
11	...	220	210	215	210	200	200	190	200	210	220	230	...
12	...	230	220	210	205	200	200	200	200	200	210	...	...
13	...	220	220	200	200	200	200	210	200	200	190	...	...
14	...	220	p220	200	200	200	200	190	200	200	200	...	...
15	...	p220	210	200	190	200	200	200	200	200	200	230	...
16	...	230	p220c	200	210	205	200	190	200	200	210	...	...
17	...	220	200	200	200	200	200	200	200	210	210	...	...
18	...	230	210	210	210	200	200	190	200	200	200	...	...
19	...	220	210	200	200	200	200	200	195	220	210	...	...
20	...	230	220	210	210	200	200	190	210	p210c	200	...	...
21	...	...	p210c	210	190	200	200	200	200	200	210	...	...
22	...	...	210	200	200	200	200	200	200	200	200	240	...
23	...	...	220	200	200	200	200	200	200	200	210	...	...
24	...	220	215	p220c	p210c	p200c	200	190	190	190	230	...	...
25	...	225	210	210	200	210	200	200	200	200	p220a	...	...
26	...	240	220	200	200	200	200	200	200	210a	220	230	...
27	...	230	220	210	210	200	200	200	190	200	210	...	...
28	...	230	p220c	210	210	200	190	190	190	p200a	225	230	...
29	...	230	210	200	200	200	200	190	190	195	215	...	...
30	...	215	210	200	200	200	200	200	200	190	220	...	...
31													
* MEAN	...	225	216	209	204	201	199	198	198	200	209	233	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f°F2 EQUAL TO OR LESS THAN f°F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 306

APRIL 1944 | APRIL 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	p1.0c	p1.0c	1.2	1.4	1.4	1.8	1.8	1.7	1.4	1.4	1.2	1.2	0.8	p1.4c	p2.3c	2.6	3.3	3.4	3.4	3.4	3.4	3.2	3.0	2.6	1.5	1.4
2	1.0	1.2	1.4	1.7	1.7	1.7	1.8	1.8	2.0	1.4	1.2	1.4	1.0	1.4	2.3	2.6	3.0	3.3	3.4	3.4	3.3	3.1	3.0	2.5	2.2	1.4
3	0.8	1.2	1.2	1.4	1.4	1.4	1.7	1.7	1.8	1.4	1.2	1.2	0.6	1.4	2.2	2.6	3.0	3.3	3.4	3.4	3.3	3.1	2.9	2.6	2.2	2.0
4	0.8	1.0	1.2	1.4	1.5	1.8	2.0	1.8	1.4	1.4	1.2	1.1	0.9	1.0	2.4	3.0	3.2	3.3	3.4	3.5	3.3	3.2	3.0	2.6	2.3	1.2
5	0.8	0.8	1.0	1.2	1.8	1.8	1.8	1.8	1.8	1.4	1.2	1.1	0.9	1.3	2.4	2.8	3.3	3.3	3.5	3.4	3.3	3.1	3.0	2.6	2.2	1.0
6	0.9	1.0	1.0	1.3	1.5	1.7	1.8	1.8	1.7	1.7	1.2	1.2	1.0	1.2	2.3	2.8	3.2	3.2	3.4	3.4	3.4	3.3	3.0	2.7	2.0	1.0
7	0.5	0.7	1.2	1.4	1.5	1.7	1.4	1.8	1.4	1.4	1.2	1.2	1.0	1.4	2.4	2.8	3.2	3.3	3.4	3.4	3.4	3.2	3.1	2.7	2.0	1.0
8	0.7	1.0	1.2	1.3	1.5	1.8	1.8	1.8	1.4	1.2	1.2	1.1	1.0	1.2	2.4	3.0	3.2	3.3	3.4	3.4	3.4	3.1	2.9	2.6	2.2	1.1
9	1.0	1.0	1.2	1.3	1.4	1.8	1.8	1.7	1.7	1.4	p1.2	1.2	1.0	1.3	2.3	2.8	3.1	3.3	3.4	3.5	3.4	3.3	3.0	2.7	2.7	1.7
10	1.0	1.2	1.2	1.4	1.8	1.8	1.8	1.8	1.8	1.7	1.3	1.2	1.0	1.4	2.4	2.4	3.1	3.4	3.5	3.4	3.4	3.3	3.0	2.6	2.1	1.0
11	1.0	1.2	1.3	1.3	1.8	1.7	1.9	1.8	1.8	1.8	1.2	1.0	1.1	1.2	2.3	2.8	3.2	3.3	3.5	3.5	3.4	3.3	3.3	2.8	2.1	1.3
12	1.0	1.2	1.4	1.4	1.8	1.9	1.8	1.8	1.8	1.8	1.3	1.2	1.1	1.3	2.3	2.8	3.0	3.3	3.5	3.4	3.4	3.2	3.0	2.6	2.1	1.1
13	1.0	1.2	1.2	1.4	1.8	1.8	1.8	1.9	1.8	1.4	1.3	1.2	1.0	1.3	2.4	2.9	3.1	3.4	3.4	3.5	3.4	3.5	3.2	2.6	2.1	1.0
14	1.0	1.2	p1.2	1.4	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2	0.8	1.3	2.2	p2.8c	3.1	3.3	3.4	3.4	3.4	3.3	p3.2c	2.6	2.1	1.1
15	0.8	1.1	1.2	p1.3c	p1.8c	p1.9c	2.0	p1.8c	1.8	p1.4c	1.4	1.3	0.8	1.2	p2.6	p3.2c	p3.1c	p3.4c	p3.5c	3.4	3.6	3.3	p2.8c	p2.4c	p2.1c	1.3
16	1.2	1.4	p1.7	2.2	1.9	2.1	2.0	2.0	2.0	1.9	1.4	1.2	1.0	1.3	2.4	p2.7	p3.3c	3.6	3.6	3.5	3.4	3.4	3.0	2.6	2.0	1.0
17	1.0	1.2	1.2	1.4	1.4	1.8	1.8	1.9	1.8	1.8	1.7	1.3	0.9	1.3	2.3	2.8	3.1	3.3	3.4	3.4	3.4	3.1	3.2	3.7	2.0	1.0
18	0.9	1.2	1.2	1.4	1.7	1.8	1.8	1.8	1.8	1.4	1.2	1.0	0.8	1.4	2.3	2.8	3.0	3.3	3.4	3.4	3.4	3.3	2.8	2.6	2.2	1.2
19	0.9	1.0	1.2	1.2	1.4	1.8	1.8	p1.7	p1.5	1.3	1.4	1.3	1.0	1.3	2.4	2.7	3.0	3.3	3.4	3.4	3.4	3.3	3.3	p2.7c	p2.0c	1.7
20	0.7	1.3	1.3	...c	...c	...c	...c	...c	...c	...c	...c	1.3	p1.0c	0.7	1.3	p3.2	p3.2c	p3.2c	3.3	3.4	3.3	3.6	p3.4c	p2.8c	p1.6c	p1.3c
21	p0.8c	1.3	1.4	1.4	1.4	2.3	1.8	1.8	1.8	1.5	1.3	1.2	1.0	p1.2c	1.4	p3.0c	p3.2c	3.2	3.4	3.4	3.4	3.2	3.0	2.7	2.1	1.0
22	1.0	1.2	1.2	1.4	1.7	1.8	1.8	1.8	1.4	1.4	1.2	1.0	0.8	1.3	2.2	2.8	p2.8c	p2.7c	3.4	3.4	3.3	3.2	2.9	2.5	2.0	0.8
23	1.0	p1.1c	p1.2c	1.7	1.7	1.4	1.8	p1.7c	1.8	1.4	1.1	1.0	1.0	1.2	p2.3c	3.0	p2.9c	3.0	3.3	p3.2c	p3.2c	p3.2c	2.9	2.6	2.0	1.0
24	1.0	1.0	1.2	p1.5c	p1.6c	p1.8c	1.8	1.9	1.8	1.4	1.3	1.2	0.9	1.3	2.3	2.9	p3.0c	p3.4c	p3.3c	3.3	3.5	3.2	2.9	2.8	2.0	0.9
25	0.7	0.8	1.2	1.3	1.3	1.4	1.4	1.3	1.4	1.3	1.2	1.2	0.9	0.8	2.3	2.5	3.0	3.3	3.5	3.4	3.4	3.1	2.9	2.4a	1.9	0.9
26	1.0	1.2	1.2	1.3	1.3	2.2	1.9	1.9	1.4	1.3	1.3	1.1	0.7	1.3	2.3	2.8	3.1	3.2	3.4	3.4	3.4	3.1	2.9	2.6	2.0	1.2
27	1.2	1.1	1.2	1.5	1.4	1.3	1.5	1.8	1.5	1.4	1.4	1.1	0.7	1.2	2.3	2.7	2.8	3.2	3.3	3.4	3.4	3.0	2.8	2.6	2.1	p1.3
28	0.9	1.4	1.4	1.3	1.4	1.4	1.9	1.8	1.4	1.3	1.2	1.0	0.9	1.3	p2.4c	p2.8c	3.0	3.4	3.4	3.5	3.5	3.2	2.9	2.8	2.0	0.9
29	1.0	1.2	1.2	1.2	1.4	1.4	1.4	1.3	1.3	1.2	1.2	0.8	0.7	1.3	2.3	2.8	3.0	3.4	3.4	3.4	3.4	3.1	2.9	2.6	2.0	0.8
30	0.9	1.2	1.2	1.3	1.3	1.4	1.3	1.3	1.3	1.2	1.2	1.1	1.2	1.2	2.2	2.6	3.0	3.1	3.4	3.4	3.4	3.3	2.9	2.7	1.9	1.2
31																										
* MEAN	0.9	1.1	1.2	1.4	1.6	1.7	1.8	1.7	1.6	1.5	1.3	1.2	0.9	1.2	2.3	2.8	3.1	3.3	3.4	3.4	3.4	3.2	3.0	2.7	2.1	1.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 307

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1944 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MAY 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p5.0c	3.5	3.1	2.7	2.6	2.2c	3.0	5.4	7.4	8.1	7.2	6.9	7.3	7.5	7.4	7.5	p7.5c	7.5	7.6	7.6	7.6	7.0	5.5	5.0	5.9
2	4.4	4.4	4.3f	4.0	...f	2.5	3.3	5.8	7.7	8.4	8.3	8.4	7.9	7.2	7.7	7.6	7.4	8.0	8.6	7.6	7.5	7.0	6.8	7.0	...
3	5.3	4.6	3.9	2.7	2.2	2.0	3.5	6.2	7.4	7.6	7.1	7.2	6.5	5.5	5.9	6.7	6.9	6.8	7.0	6.5	6.7	6.8	7.1	5.8	5.7
4	5.[illegible]	4.5	5.2	4.1	3.5	2.6	3.7	5.6	6.3	7.0	7.0	5.9	5.8	5.5	6.0	6.4	6.5	6.9	6.9	6.3	6.4	6.3	6.9	4.9	5.6
5	4.2	3.0	2.3	2.1	...f	...f	3.3	5.7	6.7	7.1	6.1	5.9	5.6	5.7	6.2	6.9	7.1	7.2	7.0	6.6	6.0	6.1	6.7	5.7	...
6	4.7	3.9	3.5	3.0	2.9	2.7	3.7	5.9	6.9	7.7	7.5	6.8	6.3	6.0	6.7	7.3	6.3	8.0	6.0	6.6	6.1	6.8	6.5	3.7	5.8
7	3.2	2.5	1.5	1.3	1.1	...f	3.1	5.7	6.8	6.6	6.2	6.0	6.2	5.9	6.2	6.6	7.2	7.3	7.8	7.0	6.8	7.0	6.7	6.0	...
8	5.6	4.8	4.0	3.7	3.0	2.4	3.2	6.0	7.1	7.0	6.3	7.0	6.8	6.5	6.6	7.2	7.9	8.0	8.0	6.6	5.8	5.8	5.6	4.6	5.8
9	4.8	3.9	3.4	2.[illegible]	2.0	1.4b	3.1	5.7	7.1	7.7	6.9	5.9	6.0	5.6	5.8	6.4	6.7	7.3	7.0	6.4	6.3	6.2	5.6	4.6	5.4
10	4.5	3.9	3.5	2.8	2.6f	2.3f	3.5	5.8	6.5	7.0	5.5	5.5	5.6	6.1	5.9	6.2	6.6	6.3	6.0	5.8	5.6	5.7	4.9	4.6	5.1
11	3.1	2.4	2.6	2.3f	2.1f	1.9f	3.1	5.6	7.0	7.5	p6.7c	5.9	p5.6	p5.9c	6.2	6.5	6.3c	6.0	6.1	5.7	6.3	6.5	5.8	5.0	5.1
12	4.2	3.3	3.2	3.3	3.1	2.5	2.9	5.4	6.3	7.6	5.8	p5.6c	5.5	5.6	5.6	5.8	6.4	6.0	5.8	5.5	5.7	6.4	5.5	5.2	5.1
13	4.0	4.0	4.4	3.8	3.2	3.0	3.2	5.5	6.8	7.2	7.1	6.6	6.6	6.4	6.9	6.7	6.7	7.0	6.7	6.3	6.4	6.4	6.1	5.0	5.7
14	4.2	4.6	4.4	3.6	2.9	2.5	2.9	5.3	6.4	p7.0	6.3	6.3	6.0	6.1	6.0	6.2	6.3	6.7	6.7	p6.1	5.8	6.0	6.0	4.9	5.4
15	4.7	3.2	2.3	2.2	1.9	1.5	2.5	4.8	5.9	6.3	p6.4c	6.4	6.1	6.1	6.7	6.7	7.0	6.8	6.7	6.7	6.3	6.7	4.8	4.4	5.1
16	3.5	3.6	3.5f	2.6f	2.3f	2.1	2.9	5.3	6.7	7.0	6.8	5.5	5.5	5.7	5.5	5.9	6.2	5.9	5.7	5.6	5.2	5.2	5.0	4.5	4.9
17	4.5	4.1	4.1	3.6	3.4	2.5f	3.5	5.3	6.7	7.0	6.5	6.1	p6.1c	p6.2c	6.2	5.9	6.3	6.7	6.8	5.9	6.3	5.8	4.4	4.1	5.3
18	4.0	3.6	2.7	2.7	2.6	2.1	2.9	5.1	6.6	7.0	7.4	6.2	5.9	5.8	6.3	7.3	7.4	7.7	7.1	6.1	5.3	5.8c	5.5	4.8c	5.3
19	p4.4c	4.0c	p3.9c	3.8c	p3.4c	2.9c	4.2c	p5.5c	6.9	7.3	7.3	6.3	6.3	6.7	6.6	p6.7c	6.7	6.6	5.9	5.4c	4.8c	4.9c	4.9	5.6	5.5
20	5.5	4.8	4.7	3.2c	2.7c	2.6c	4.9c	5.0	6.6	p6.9c	7.0	6.8c	6.7	6.7	7.0	p6.7c	p7.2c	6.6	6.4	5.9	5.7	5.5	5.3	5.1	5.6
21	4.4	4.4	4.4	4.1	3.2	2.6f	2.5	4.5	5.4	6.0	5.7	6.4	5.9	5.3	5.5	5.8	6.7	7.3	7.1	5.8	4.3	4.3	2.4	3.1	4.9
22	3.5	3.3	p3.0	2.7	2.3	2.0	2.7	4.9	5.8	p5.7c	5.5	5.7	5.5	5.5	5.7	6.2	6.4	6.4	6.7	5.3	5.1	4.7	3.8	3.4	4.7
23	3.3	3.3	3.0	2.1	1.5	1.3f	2.7	5.1	6.4	7.2	6.7	6.3	6.3	6.5	6.2	6.6	6.7	6.8	6.6	5.7	5.8	5.9	5.1	5.0	5.1
24	3.9	3.1	3.2	2.5	1.7	1.4f	3.1	5.7	6.4	6.7	6.2	6.2	6.5	6.6	6.9	7.1	7.0	7.9	7.9	6.5	5.0	5.1	4.1	2.7	5.2
25	3.0	2.5	2.7	2.3	1.9	1.7	2.9	5.4	7.0	6.8	6.0	5.8	6.2	6.4	6.1	6.3	6.5	7.0	6.7	6.4	5.9	5.6	5.1	5.0	5.1
26	5.1	4.2	5.1	3.2	2.4	2.0	3.1	5.1	6.2	6.6	5.6	5.5	5.5	5.7	5.6	5.9	6.3	5.4	5.1	5.0	5.6	5.7	4.6	4.0	4.9
27	4.1	4.0f	4.0f	3.8f	3.2f	2.2f	3.0	5.1	5.6	6.4	6.9	6.8	6.7	6.2	6.2	6.4	6.0	6.3	6.5	5.7	5.6	5.3	4.9	3.3	5.2
28	2.7	2.8	2.9f	2.5f	1.8f	1.3f	2.9	5.1	6.3	6.6	6.1	5.8	5.3	5.2	5.0	5.5	6.0	6.2	6.2	5.2	4.5	5.1	4.7	4.3	4.6
29	3.8	3.0	3.0	2.5	2.4f	2.0f	2.9	5.3	6.3	7.4	6.9	6.0	5.9	5.4	5.8	5.8	6.1	5.7	5.6	4.4	3.8	4.6	4.6	4.3	4.7
30	3.6	3.8	3.8	3.8f	3.7f	p2.[illegible]c	p3.2c	p5.5c	p6.2c	6.8	7.4	p7.3c	6.1	5.9	5.4	p5.5c	6.3	6.5	p6.8c	5.5	5.5	5.0	4.2	3.3	5.2
31	2.5	2.5	2.3	2.2f	2.1f	2.0f	2.9	5.2	6.1	6.5	5.8	5.4	5.6	5.6	6.2	6.9	6.4	6.2	6.2	5.5	4.9	5.9	4.5	5.1	4.8
*MEAN	4.2	3.7	3.5	3.0	2.5	2.2	3.2	5.4	6.6	7.0	6.6	6.3	6.1	6.0	6.2	6.5	6.7	6.8	6.8	6.0	5.8	5.8	5.3	4.6	5.3

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 308

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1944 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — MAY 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	q220c	210	220	240	270	270	250	260	280	320	340	350	320	330	310	310	q280c	250	260	290	220	220	220	220	269
2	240	260	270	270	280	320	250	260	280	300	330	340	360	420	320	230	230	q200a	220	250	240	250	230	220	274
3	215	205	220	220	240	250	250	250	280	320	340	350	370	400	360	320	280	230	300	270	260	220	210	210	274
4	220	230	220	220	230	240	240	250	280	320	350	370	430	420	370	340	320	q290c	260	280	280	280	210	280	289
5	210	230	250	290	270	330	250	270	310	330	350	400	450	390	350	360	290	240	260	290	290	270	200	210	295
6	220	240	240	230	240	250	240	250	280	310	350	370	370	370	380	320	280	q255c	230	270	230	220	200	220	274
7	220	210	260	280	330	320	240	280	300	340	370	390	360	360	400	340	300	230	300	240	250	230	210	220	291
8	210	215	230	230	230	280	250	260	300	340	340	370	340	360	340	330	280	240	240	230	240	230	220	230	272
9	210	210	230	220	240	270	250	260	300	330	360	380	420	400	360	340	310	220	250	260	250	250	210	200	280
10	200	220	250	300	280	250	250	260	300	340	380	440	430	390	380	340	320	240	250	260	220	200	210	200	288
11	220	240	280	310	320	250	240	260	300	320	q360c	400	400	400	370	330	320	230	240	240	240	240	220	210	289
12	210	220	230	230	260	250	240	270	300	320	440	q430c	420	430	360	350	300	240	270	280	250	210	220	220	290
13	220	220	220	220	240	270	240	250	280	330	330	400	370	370	360	340	320	240	260	280	245	240	205	220	278
14	220	210	220	230	240	280	250	290	310	q370	350	360	420	370	390	350	300	280	230	230	240	220	220	210	283
15	210	220	230	240	250	270	250	240	300	330	q355c	380	400	410	350	310	300	240	280	240	240	230	220	220	280
16	215	240	250	240	270	270	250	280	310	325	370	450	520	420	360	380	270	240	260	260	250	250	240	230	298
17	220	240	240	250	250	260	240	260	300	350	340	400	q410c	q420c	430	340	320	220	230	240	240	220	220	220	286
18	200	200	230	240	240	280	250	270	300	310	330	330	390	380	360	310	290	240	250	310	270	240	220	230	278
19	220	240	230	230	230	250	240	q265c	290	320	340	350	400	340	350	q340c	330	220	260	270	270	310	240	220	281
20	210	210	210	230	240	255	240	300	290	320	340	350	330	330	370	320	290	230	240	200	230	230	220	220	267
21	240	220	220	220	230	240	230	230	310	350	400	360	400	380	370	310	320	220	200	220	220	210	230	235	274
22	245	240	250	240	240	250	240	300	300	q365c	430	420	430	430	390	350	310	240	200	230	230	215	220	240	292
23	240	260	290	310	290	310	240	270	300	330	340	345	400	390	370	330	315	220	220	265	270	230	220	210	290
24	210	220	200	220	260	320	250	260	300	330	370	400	340	380	360	320	325	230	240	220	230	220	220	230	277
25	230	230	240	270	250	240	250	280	300	340	350	380	400	380	380	325	310	250	230	240	270	250	240	230	286
26	220	230	220	220	230	240	250	280	300	340	420	400	450	430	430	335	325	230	270	250	240	220	220	240	291
27	240	240f	230	220	220	250	250	240	280	300	320	370	370	370	380	340	340	240	240	230	220	220	220	240	274
28	240	240	240	280	370	290	240	280	300	350	400	400	480	520	410	370	310	250	240	240	280	240	230	240	310
29	220	240	250	320	290	260	240	270	305	330	370	460	400	430	370	330	320	240	270	330	330	270	230	220	304
30	240	250	240	260	270	270	260	q280c	q300c	320	360	370	420	430	420	390	380	230	240	240	230	220	220	220	294
31	230	250	260	300	280	280	250	320	300	315	400	415	440	405	380	330	335	230	235	240	240	230	230	220	296
MEAN*	221	229	238	251	261	270	245	268	296	330	362	385	401	395	372	333	307	237	248	255	249	235	220	224	285

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 309

MAY 1944 MAY 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	3.8	4.1	4.3	4.4	4.4	4.4	4.3	4.2	4.2	p3.9c	...	...
2	...	3.8	4.2	4.4	4.4	4.3	4.5	4.5	4.1	...a	...a	...	...
3	...	3.8	4.2	4.3	4.5	4.3	4.4	4.3	4.2	4.0	p3.9a	...	...
4	...	3.8	4.2	4.2	4.4	4.3	4.3	4.2	4.2	4.2	3.9	...	...
5	...	3.9	4.1	4.2	4.3	4.3	4.3	4.2	4.2	4.2	3.9	...	...
6	...	3.9	4.2	4.2	4.3	4.4	4.3	4.4	4.3	4.2	4.2	...	...
7	...	3.9	4.3	4.2	4.3	4.3	4.3	4.3	4.3	4.3	3.9	...	...
8	...	3.8	4.2	4.4	4.4	4.3	4.3	4.4	4.2	4.2	3.9	...	...
9	...	3.8	4.2	4.3	4.2	4.3	4.3	4.3	4.2	4.2	4.2	...	...
10	...	3.8	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.1	4.0	...	...
11	...	3.7	4.1	4.3	p4.3c	4.3	4.3	4.3	4.3	4.1	3.9	...	...
12	...	3.8	3.9	4.1	4.3	p4.3c	4.3	4.3	4.2	4.0	3.9	...	...
13	...	4.0	4.2	4.2	4.3	4.5	4.3	4.3	4.1	4.1	4.0	...	...
14	...	3.8	4.0	4.2	4.2	4.3	4.3	4.2	4.3	4.1	4.0	3.8	...
15	...	...	4.0	4.2	p4.3c	4.3	4.3	4.2	4.2	4.0	4.0	...	...
16	...	3.8	4.0	4.2	4.3	4.4	4.3	4.2	4.1	4.0	3.8	...	...
17	...	3.9	4.0	4.2	4.3	4.3	p4.3c	p4.2c	4.2	4.0	4.0	...	...
18	...	3.8	4.0	4.2	4.2	4.2	4.3	4.3	4.1	4.1	3.9	...	...
19	...	p3.8c	4.2	4.2	4.2	4.2	4.3	4.2	4.1	p4.0c	4.0	...	...
20	...	3.8	4.2	4.1	4.2	4.2	4.3	4.2	4.2	4.0	3.9	...	...
21	...	...	4.1	4.2	4.3	4.2	4.2	4.2	4.1	4.0	3.9	...	...
22	...	3.8	4.0	p4.2c	4.3	4.2	4.2	4.2	4.2	4.0	3.9	...	...
23	...	3.8	4.1	4.2	4.2	4.3	4.4	4.2	4.2	4.0	3.8	...	...
24	...	3.8	4.2	4.1	4.3	4.3	4.2	4.2	4.2	4.0	4.1	...	...
25	...	3.8	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.0	3.9	...	...
26	...	3.8	4.1	4.1	4.2	4.2	4.2	4.1	4.1	4.0	4.0	...	...
27	...	3.7	4.0	4.2	4.2	4.2	4.1	4.2	4.0	4.0	3.9	...	...
28	...	3.7	4.0	4.1	4.2	4.2	4.2	4.1	4.0	3.9	3.8	...	...
29	...	3.8	4.1	4.2	4.2	4.2	4.2	4.4	4.3	4.0	3.9	...	...
30	...	p3.8c	p4.0c	4.2	4.2	4.1	4.2	4.2	4.2	4.1	3.8	...	...
31	...	3.8	4.0	4.1	4.2	4.2	4.2	4.3	4.2	4.0	4.2	...	...
MEAN*	...	3.8	4.1	4.2	4.3	4.3	4.3	4.2	4.2	4.1	4.0	3.8	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	230	220	200	200	200	200	200	200	210	p220c	...	...
2	...	230	220	220	210	210	210	200	200	...a	...a	...	...
3	...	230	220	210	210	200	200	200	200	190	220	...	...
4	...	230	215	210	210	200	200	200	190	180	200	...	...
5	...	220	215	210	200	200	200	190	190	200	220	...	...
6	...	230	220	220	210	200	200	200	190	200	230	...	...
7	...	230	220	210	200	200	205	200	200	190	230	...	...
8	...	230	220	220	210	210	200	200	200	190	200	...	...
9	...	240	220	210	210	200	200	190	200	200	220	...	...
10	...	230	215	210	200	200	200	200	190	180	200	...	...
11	...	220	220	210	p200c	200	200	190	190	200	230	...	...
12	...	230	210	210	200	p200c	200	200	200	200	210	...	...
13	...	220	220	200	200	210	200	200	200	200	210	...	...
14	...	230	220	200	190	200	200	200	190	200	200	230	...
15	...	...	210	210	p200c	200	200	200	200	200	200	...	...
16	...	230	220	210	200	200	200	190	190	190	200	...	...
17	...	230	220	205	200	200	p200c	p200c	200	200	200	...	...
18	...	230	220	220	210	200	200	200	200	200	200	...	...
19	...	...	210	210	200	200	200	200	190	p200c	210	...	...
20	...	220	210	210	200	200	200	200	190	190	220	...	...
21	...	...	210	210	200	200	190	190	190	190	210	...	...
22	...	230	210	p205c	200	200	200	190	200	195	210	...	...
23	...	225	220	205	210	200	200	195	190	190	200	...	...
24	...	230	220	210	200	200	190	200	200	195	220	...	...
25	...	220	210	200	190	190	200	200	200	200	215	...	...
26	...	225	210	210	200	200	200	200	200	200	210	...	...
27	...	225	220	200	200	200	200	200	210	200	210	...	...
28	...	230	215	200	200	200	200	190	190	190	200	...	...
29	...	235	215	220	200	200	200	200	200	190	220	...	...
30	...	p230c	220	215	210	205	200	200	190	200	200	...	...
31	...	225	215	210	190	190	200	190	190	200	210	...	...
MEAN*	...	228	216	209	202	200	200	197	196	196	211	230	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1944 | MAY 1944

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.9	0.8	p1.2	1.2	1.2	1.3	1.3	1.2	1.3	1.2	p1.1	1.0	1.0
2	1.0	1.0	1.2	1.2	1.3	1.3	1.4	1.3	1.3	1.2	1.1	0.8	0.7
3	1.0	1.0	1.2	1.3	1.3	1.3	1.3	1.4	1.3	1.3	1.2	1.0	0.8
4	1.0	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.0
5	0.9	1.2	1.2	1.3	1.4	2.0	1.9	1.9	1.3	1.3	1.3	1.2	1.0
6	1.0	1.1	1.3	1.3	1.3	2.0	1.4	1.8	1.3	1.4	1.3	1.0	0.8
7	0.9	1.1	1.2	1.3	0.6	1.4	1.3	1.3	1.3	1.3	1.2	1.0	0.8
8	0.8	1.0	1.2	1.3	1.4	1.4	1.4	1.3	1.8	1.2	1.2	1.1	1.0
9	1.0	1.2	1.2	1.3	1.4	1.3	2.0	1.8	1.3	1.2	1.2	1.2	1.0
10	1.0	1.1	1.2	1.3	1.4	1.3	1.8	1.8	1.7	1.3	1.2	1.2	1.0
11	0.9	1.1	1.3	1.4	p1.4c	1.9	2.1	1.4	1.4	1.3	1.2	1.1	1.0
12	0.9	1.2	1.2	1.4	1.4	p1.4c	1.4	1.4	1.3	1.3	1.2	1.1	0.8
13	0.9	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.2	1.2	1.0	0.8
14	0.9	1.0	1.2	p1.2c	1.3	1.2	1.3	1.2	1.2	1.3	1.2	0.7	0.6
15	0.9	1.0	1.2	1.3	p1.5c	2.1	2.2	2.0	2.0	1.2	1.1	1.1	0.7
16	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.1	1.1	0.7	0.8
17	1.0	1.1	1.1	1.2	1.2	1.2	p1.3c	p1.3c	1.2	1.2	1.2	1.0	0.8
18	0.8	0.8	1.1	1.2	1.3	p1.4c	1.4	0.9	1.3	1.2	1.1	1.0	0.8
19	p1.1c	p1.2c	p1.5c	p1.7c	1.3	1.4	p1.2c	1.3	p1.2c	p1.2c	p1.2c	1.2	p0.9c
20	p0.8	1.0	p1.2c	1.4	1.2	1.2	1.2	1.2	1.2	p1.2c	1.0	1.0	0.8
21	p0.8c	0.8	p0.8c	1.2	1.3	1.3	1.3	1.4	1.3	1.3	1.1	0.8	p0.9c
22	p1.1c	1.1	p1.2e	p1.3e	1.3	1.3	1.4	1.3	1.2	1.2	1.2	1.0	1.0
23	0.8	0.8	1.2	1.2	1.2	1.3	1.2	1.3	1.3	1.2	1.2	1.0	0.7
24	0.7	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.0	0.9
25	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.1	0.6
26	0.9	0.7	1.2	1.3	1.2	1.3	1.3	1.3	1.3	1.3	1.1	1.2	0.6
27	1.0	1.1	1.2	1.4	1.2	1.2	1.2	1.3	1.2	1.2	1.0	0.6	0.7
28	1.0	0.6	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.0
29	1.1	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.0	1.1
30	p1.0c	1.4	1.5	1.2	1.3	p1.4	1.5	1.3	1.3	1.4	1.1	1.0	0.6
31	0.9	1.1	1.1	1.3	1.3	1.3	1.3	1.4	1.4	1.3	1.2	1.0	0.8
* MEAN	0.9	1.0	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.3	1.2	1.0	0.8

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	2.2	2.8	3.0	3.1	3.4	3.4	3.4	3.1	2.9	p2.4c	1.8	1.0
2	1.2	2.2	2.7	3.1	3.2	3.4	3.4	3.2	3.0	2.8	2.4	1.9	1.1
3	1.3	2.3	2.8	3.0	3.2	3.4	3.3	3.3	3.0	2.8	2.8	2.1	1.3
4	1.2	3.4	2.7	3.0	3.3	3.4	3.4	3.4	3.2	2.9	2.5	2.0	1.0
5	1.1	2.2	2.7	2.9	3.2	3.4	3.4	3.4	3.1	2.9	2.7	1.9	1.0
6	1.2	2.3	2.8	3.1	3.3	3.5	3.4	3.4	3.1	2.9	2.4	2.0	1.0
7	1.2	2.3	2.8	3.0	3.1	3.4	3.4	3.3	3.2	2.8	2.6	1.9	1.3
8	1.0	2.1	2.8	3.0	3.2	3.4	3.5	3.4	3.4	2.8	2.4	2.1	1.1
9	1.2	2.3	2.8	2.9	3.1	3.4	3.4	3.4	3.2	2.9	2.9	2.9	1.1
10	1.3	2.4	2.5	3.1	3.3	3.4	3.4	3.4	3.2	2.9	2.5	2.0	1.4
11	1.2	2.3	2.8	3.2	p3.3c	3.4	3.7	3.4	3.2	3.0	2.6	2.0	1.1
12	1.1	2.3	2.8	3.1	3.4	p3.4c	3.4	3.5	3.1	3.0	2.4	1.9	0.8
13	1.2	2.3	2.8	3.1	3.5	3.6	3.6	3.4	3.1	3.2	2.7	2.0	0.8
14	1.2	2.2	2.6	3.0	3.1	3.4	3.6	3.4	3.2	2.9	2.5	1.9	1.0
15	1.2	2.3	2.5	3.2	p3.3c	3.4	3.5	3.4	3.4	2.9	2.4	2.0	1.2
16	1.2	2.4	3.0	3.1	3.2	3.4	3.3	3.4	3.1	2.8	2.5	1.8	0.8
17	1.0	2.2	2.7	3.2	3.2	3.4	p3.3c	p3.3c	3.2	2.3	2.4	2.1	0.8
18	1.3	2.2	2.8	3.1	3.4	p3.3c	3.4	3.3	3.1	2.9	2.4	2.0	0.8
19	p1.3c	p2.3c	2.9	p3.2c	3.1	3.4	3.4	3.1	3.0	p2.8c	2.5	p2.2c	p0.9c
20	p1.4c	2.4	2.9	3.2	3.2	3.4	3.3	3.3	3.1	3.0	2.3	1.9	0.8
21	p1.2c	2.0	2.7	3.1	3.3	3.3	3.3	3.3	3.0	2.9	2.7	1.9	p1.1c
22	p1.3c	2.5	2.8	p3.0c	3.4	3.5	3.4	3.3	3.1	2.8	2.4	1.8	1.1
23	1.2	2.2	2.8	3.0	3.2	3.2	3.4	3.2	3.0	2.8	2.4	1.9	1.0
24	1.1	2.0	2.6	2.9	3.1	3.2	3.2	3.5	3.1	2.8	2.6	2.0	1.4
25	1.1	2.0	2.6	2.8	3.0	3.1	3.4	3.5	3.2	3.0	2.6	1.2	1.0
26	1.2	2.1	2.7	3.0	3.1	3.1	3.4	3.2	3.1	2.8	2.4	1.9	1.2
27	1.2	2.3	2.7	3.0	3.2	3.3	3.3	3.2	3.0	2.9	2.4	1.8	2.0
28	1.1	2.3	2.8	2.9	3.1	3.4	3.4	3.3	3.1	2.9	2.6	1.8	2.2
29	1.1	2.2	2.7	3.1	3.2	3.2	3.3	3.4	3.1	2.8	2.6	1.8	1.0
30	p1.5c	p2.0c	p3.0c	2.9	3.1	3.2	3.3	3.3	3.1	2.6	2.4	1.9	0.8
31	1.1	2.2	2.8	3.2	3.2	3.4	3.4	3.3	3.2	2.8	2.4	1.0	1.0
* MEAN	1.2	2.2	2.7	3.0	3.2	3.4	3.4	3.3	3.1	2.9	2.5	1.9	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 311

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1944 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND JUNE 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	4.2	3.7	3.3	2.0	1.7	1.5	2.4	4.4	5.4	5.6	5.6	5.6	5.6	5.5	6.0	6.0	5.9	6.4	6.7	5.3	4.8	4.6	3.5c	2.8	4.5
2	2.0	1.7	1.9	1.7	1.5	1.5f	2.6	4.9	6.8	7.3	6.3	5.4	5.1	5.6	5.7	6.0	6.1	6.3	6.2	5.5	5.4	5.4	3.3	3.2	4.5
3	2.7	2.3	2.1	1.8	1.5	1.4f	2.5	4.7	5.6	6.3	6.0	6.1	6.0	6.7	6.8	6.0	6.6	7.8	7.4	6.0	5.7	4.3	3.8	2.8	4.7
4	2.3	2.2	2.1	1.9	1.6	1.4	2.7	4.9	6.2	6.6	6.0	5.1	5.0	5.4	6.0	p5.9c	p5.7c	5.5	6.0	5.8	4.8	4.9	2.7	2.9	4.3
5	3.2	2.5	2.6	2.2	1.8	1.7	2.7	4.7	6.0	6.0	5.3	5.7	5.9	5.8	6.4	6.6	7.3	6.6	6.9	5.8	6.6	6.1	5.3	4.3	4.9
6	4.6	4.8	p4.5f	4.2f	3.7f	3.5	3.0	5.3	p6.5c	7.3	7.1	6.0	6.1	5.6	6.2	5.9	5.7	6.5	6.6	6.0	6.4	4.8	4.3	3.1	5.3
7	3.7	3.2	2.5	1.8	1.6	1.5	2.7	4.9	5.6	6.3	6.1	6.0	5.7	5.9	5.7	5.6	5.5	6.1	6.3	5.1	4.5	3.5	2.1	2.0	4.3
8	1.7	2.2	2.4	2.4	2.2	2.2f	2.6	4.9	5.9	6.2	5.2	5.9	5.3	5.4	5.2	5.4	5.4	5.8	6.1	4.4	4.9	6.2	4.8	4.4	4.5
9	4.1f	4.0f	4.0f	3.7f	3.7f	2.7	2.5	4.7	5.7	6.8	5.7	5.4	p5.5c	5.5	6.2	6.4	7.0	7.0	7.1	5.4	5.1	5.3	5.2	3.5	5.1
10	2.9	2.7	2.5	2.4	2.0f	2.1f	2.6	4.9	6.0	6.2	6.2	5.9	5.8	6.5	6.3	6.4	6.8	6.3	6.2	5.3	5.3	5.5	4.9	4.6	4.8
11	3.2	3.0	3.3	2.6f	2.5	2.4	2.5	4.6	p5.1c	5.6	6.1	5.7	5.9	5.7	5.6	6.0	5.8	6.3	6.4	5.3	5.2	5.8	5.5	4.6	4.8
12	4.7	4.4	4.3	3.2	2.6	2.8	2.6	4.9	7.0	6.6	6.3	5.8	5.6	6.4	5.5	5.8	5.6	5.7	5.2	5.0	p5.1c	4.9	3.8	3.3	4.9
13	3.1	2.7	p2.4c	p2.2c	p1.9c	1.7	2.8	5.1	5.6	6.2	6.5	6.2	5.7	5.5	5.8	6.3	7.0	7.4	6.6	5.3	4.3	4.8	p4.0c	4.7	4.7
14	4.6	4.6	4.1	3.4	3.2	2.9	2.2	4.3	5.8	6.6	6.8	6.7	6.1	6.3	6.6	6.1	6.6	6.4	5.8	4.7	p4.6f	p4.4f	4.3	3.9	5.0
15	3.9	3.9	p3.5f	p3.2f	p3.0f	p2.7f	2.2	4.3	5.6	6.0c	6.1	6.4	6.8	7.0	5.9	6.9	6.9	7.2	6.3	5.8	...c	...c	...c	...c	...
16	...c	...c	...c	...c	...c	...c	...c	...c	...c	6.1	6.1c	p6.1c	6.2	6.5	6.9	6.6	6.8	6.7	6.8	5.8	5.8	5.7c	...c	...c	...
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	5.9	5.8	p6.0c	p6.2c	6.4	7.1	6.6	7.9	7.6	7.7	6.0	5.4	6.3	5.3	4.7	...
18	4.0	3.0	3.6	3.1	3.2	2.7	2.1	4.2	5.0	5.4	5.7	5.9	6.3	6.7	6.9	6.8	6.4	6.8	7.1	6.5	5.8	5.8	5.0	5.1	5.1
19	5.0	4.0	3.4	3.1	3.0	2.5f	2.2	4.8	6.4	6.6	6.2	5.5	5.8	5.9	5.6	5.8	6.7	6.8	5.9	5.5	5.5	5.4	5.1	5.0	5.1
20	4.8	3.9	4.0f	p3.6f	p3.2f	p2.9f	2.2	4.5	5.6	6.3	5.8	5.5	6.0	5.9	6.4	5.6	p5.8c	6.0	5.5	4.6	4.8	6.2	4.9	3.4	4.9
21	2.7	2.9	2.8	2.0	1.7	1.5	2.4	4.7	5.8	6.1	6.3	6.4	6.0	6.7	7.4	7.8	7.3	7.2	6.5	p6.2c	p5.8c	p5.4c	5.1	4.6	5.1
22	4.3	4.4f	...f	3.3f	2.8	1.6f	2.4	4.8	5.4	5.6	5.4	5.5	5.8	6.0	6.4	6.5	6.7	7.2	5.9	6.4	5.0	p5.0c	5.0	4.6	...
23	3.3	2.6	2.8	2.4	2.0	2.0f	2.3	4.3	4.8	4.8	5.7	5.8	5.3	6.0	6.6	6.3	6.8	7.0	6.3	p5.6c	5.0	p4.8c	4.5	3.5	4.5
24	2.6	2.3	2.1	1.7	1.6	1.2	p2.3c	p4.3c	p5.0c	5.0	5.3	5.1	5.4	p5.5c	5.4	5.5	5.6	6.1	5.6c	5.0	4.9	p4.6c	4.3	2.6	4.1
25	1.8	1.5	1.5	...b	...b	...b	2.3	4.3	5.2	5.2	5.5	5.6	5.4	5.9	5.3	5.8	6.3	7.2	6.0	4.9	4.8	4.8	4.9	4.0	...
26	3.4	2.8	2.6c	...f	...f	...f	2.2	4.3	4.9	5.4	5.8	5.5	5.1	5.5	7.2	7.2	6.7	6.5	6.8c	7.0	6.6c	p5.2c	3.8	4.7	...
27	2.4	2.0	2.6	...f	...f	...f	2.5	5.0	6.0	6.5	5.9	6.0	5.6	5.7	6.1	6.2	6.6	7.0	6.8	5.6	6.1	6.7	5.5	4.7	...
28	3.8	3.9	3.7	...f	3.0f	...f	p2.4c	p4.9c	p5.8c	6.4	6.0	5.8	5.9	6.1	6.3	5.7	6.3	6.1	6.9	6.0	5.2	5.1	4.8	4.5	...
29	3.4	3.1	3.4	3.2	2.9f	...f	2.2	4.7	5.7	6.0	5.6	5.6	5.5	6.0	6.0	6.1	5.8	6.2	5.7	5.3	4.7	5.7	6.2	4.0	...
30	3.6	2.6	2.4	2.0	2.1	...f	2.2	4.5	5.5	5.9	6.9	6.2	5.2	5.5	5.7	6.1	6.2	5.9	5.1	4.5	4.8	5.1	5.0	5.4	...
31																									
MEAN*	3.4	3.1	2.9	2.6	2.4	2.1	2.4	4.7	5.7	6.1	6.0	5.8	5.7	6.0	6.2	6.2	6.4	6.6	6.3	5.5	5.3	5.2	4.5	4.0	4.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 312

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1944 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JUNE 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	225	220	210	230	250	260	250	230	300	350	400	410	435	370	370	360	325	230	230	230	240	230	220	230	284
2	240	265	290	350	350	310f	260	220	325	300	360	430	500	410	400	320	310	225	225	230	200	200	210	210	298
3	230	230	250	270	310	340	250	240	340	325	380	370	360	380	325	q320c	320	230	230	220	205	210	200	220	281
4	230	230	240	240	240	260	240	265	300	335	400	430	500	460	340	q300c	q260c	230	240	240	230	200	230	230	286
5	220	230	220	250	270	300	250	270	320	310	q435c	460	400	400	340	300	270	230	200	240	220	200	200	230	282
6	250	270	270	260f	270f	260	260	270	q280c	310	370	380	410	420	340	350	340	230	230	220	230	220	215	230	287
7	220	220	240	250	290	290	240	230	315	340	380	400	410	430	430	360	300	230	230	225	200	200	240	240	288
8	240	240	260	290	240	260	250	280	320	370	410	435	510	430	390	420	300	230	220	240	240	220	240	260	304
9	270	280	250	240	240	240	240	230	310	320	340	320	q450c	490	380	340	280	200	220	240	250	240	200	240	284
10	260	260	240	260	270	300	240	225	290	310	380	400	420	370	390	280	310	230	260	260	250	260	230	215	288
11	230	230	240	250f	250	250	250	230	q280c	330	390	380	390	430	420	310	300	235	240	250	260	250	220	230	285
12	210	230	210	250	260	250	250	230	260	365	385	420	390	415	430	455	330	245	260	235	q225c	220	230	230	291
13	225	225	q220c	q250c	q280c	300	260	260	290	315	340	390	430	405	370	355	320	230	225	230	260	250	230	225	287
14	220	220	215	250	250	260	290	230	290	330	340	350	360	390	380	360	300	330	290	330	330	250	240	260	294
15	240	240	230	250	255	290	300	250	310	330	400	360	360	385	340	375	345	250	280	310	...c	...c	...c	...c	...
16	...c	...c	...c	...c	...c	...c	...c	...c	...c	345	q370c	q390c	410	370	350	350	315	250	265	280	250	260	q225c	250	...
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	310	375	q400c	q390c	380	360	365	340	250	260	285	280	240	220	230	...
18	235	235	240	260	245	240	300	245	360	350	380	410	380	370	385	350	285	235	240	250	240	230	235	235	289
19	230	240	260	265	240	250f	275	240	285	330	345	380	415	390	380	335	325	245	210	240	235	240	230	230	284
20	240	260	275	260	260	250	290	260	315	330	340	420	410	375	380	340	q300c	265	255	290	255	225	215	225	293
21	230	250	245	250	280	295	260	240	300	330	340	380	360	360	330	325	280	250	260	300	275	240	220	250	285
22	270	240f	265	250f	235	275	270	240	320	340	500	385	420	350	370	335	300	260	250	250	230	230	230	225	293
23	230	245	245	245	305	320	290	245	430	350	400	380	425	400	340	390	315	250	260	270	240	235	230	220	302
24	230	250	270	280	250	260	q280c	q240c	q350c	380	360	470	380	q390c	400	340	330	240	260	290	250	230	220	230	299
25	230	250	270	...b	...b	...b	260	230	350	380	420	420	400	370	400	360	300	235	240	260	260	250	230	230	...
26	250	240	q290c	270f	230f	250f	260	230	430	390	360	450	360	440	320	380	280	220	260	260	230	230	240	220	295
27	240	270	290	310f	330	310	250	240	300	350	345	380	410	400	390	330	270	230	250	270	260	230	230	250	297
28	260	270	270	260	260	240	q250c	q240c	q310c	360	370	370	410	390	340	370	320	240	250	270	300	270	210	230	294
29	220	250	250	260	280	290	250	250	320	340	410	400	450	360	410	340	350	230	260	280	320	260	220	230	301
30	230	230	230	280	260	280	250	230	300	360	400	400	440	370	380	380	330	330	280	310	310	320	220	230	306
31																									
MEAN*	236	244	249	262	267	275	261	242	318	340	381	399	413	397	369	350	308	243	246	260	251	236	223	232	292

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 313

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.2	4.2	4.2	4.2	4.2	4.1	4.2	4.2	4.0	...	...
2	...	...	4.0	4.1	4.2	4.3	4.2	4.1	4.2	4.0	3.9	...	...
3	...	...	4.0	4.2	4.2	4.2	4.1	4.2	4.1	p4.0c	4.1	...	...
4	...	3.8	3.8	4.0	4.2	4.2	4.2	4.1	4.1	p4.0c	p3.9c	...	...
5	...	3.7	4.0	4.2	p4.2c	4.3	4.2	4.3	4.2	4.0	3.7	...	...
6	...	4.0	p4.1c	4.3	4.2	4.3	4.3	4.3	4.2	4.2	4.3	...	...
7	...	...	4.0	4.1	4.2	4.2	4.3	4.2	4.2	4.1	3.8	...	...
8	...	3.8	4.0	4.1	4.2	4.3	4.3	4.3	4.2	4.0	3.9	...	...
9	...	...	4.0	4.1	4.3	4.3	4.3	4.3	4.2	4.1	4.0	...	...
10	...	...	4.0	4.2	4.2	4.2	4.3	4.3	4.4	4.0	3.9	...	...
11	...	...	p4.0c	4.2	4.2	4.2	4.3	4.2	4.3	4.0	3.8	...	...
12	...	...	4.0	4.2	4.3	4.2	4.3	4.2	4.3	4.0	3.9	...	...
13	...	3.8	4.0	4.2	4.1	4.3	4.2	4.2	4.2	4.2	4.1	...	...
14	...	...	3.9	4.2	4.3	4.3	4.3	4.5	4.2	4.3	4.0	...	...
15	...	...	4.1	4.1	4.4	4.3	4.3	4.4	4.2	4.2	4.2	...	...
16	...	...	p4.1c	p4.2c	p4.3c	p4.3c	4.3	4.2	4.2	4.1	4.0	...	...
17	...	...	p4.0c	4.0	4.2	4.2	4.3	4.2	4.3	4.2	3.8	...	...
18	...	...	4.0	4.2	4.3	4.2	4.2	4.2	4.2	4.1	4.0	...	...
19	...	...	4.0	4.1	4.2	4.2	4.2	4.1	4.2	4.0	3.8	...	...
20	...	...	4.0	4.2	4.1	4.1	4.2	4.2	4.0	4.0	...	...	...
21	...	...	3.9	4.1	4.1	4.2	4.3	4.1	4.1	4.0	4.0	...	...
22	...	...	4.0	4.0	4.1	4.2	4.2	4.1	4.1	3.9	3.8	...	...
23	...	...	3.9	4.0	4.0	4.1	4.2	4.1	4.0	4.0	3.9	...	...
24	...	...	...	3.9	4.0	4.3	4.1	p4.1c	4.1	3.9	3.8	...	...
25	...	...	4.0	4.0	4.1	4.1	4.2	4.1	4.0	4.0	3.8	...	...
26	...	...	3.9	3.9	4.0	4.2	4.1	4.2	4.1	4.1	3.8	...	...
27	...	...	4.1	4.2	4.2	4.3	4.2	4.2	4.2	4.1	3.8	...	...
28	...	...	p4.0c	4.2	4.2	4.2	4.2	4.2	4.0	4.0	4.0	...	...
29	...	...	3.9	4.1	4.1	4.1	4.2	4.1	4.1	4.0	3.9	...	...
30	...	...	4.0	4.2	4.2	4.2	4.3	4.1	4.0	3.9	3.0	...	...
31													
MEAN*	...	3.8	4.0	4.1	4.2	4.2	4.2	4.2	4.2	4.0	3.9	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	210	200	200	200	200	195	180	185	215	...	...
2	...	...	215	200	190	190	200	200	180	180	200	...	...
3	...	...	220	200	p200c	200	200	195	190	200	220	...	...
4	...	225	215	200	190	200	180	180	190	p200c	p210c	...	...
5	...	220	210	200	p200c	195	190	190	200	200	200	...	...
6	...	215	p230c	200	190	200	195	190	175	180	210	...	...
7	...	...	200	205	210	190	190	185	200	190	200	...	...
8	...	220	210	210	200	190	190	190	180	200	210	...	...
9	...	...	200	200	200	190	p195c	190	190	200	200	...	...
10	...	...	215	210	200	200	200	200	190	200	190	...	...
11	...	...	p210c	200	200	200	200	200	190	200	200	...	...
12	...	...	200	205	200	200	200	200	195	190	205	...	...
13	...	230	215	210	200	200	190	195	195	...f	200	...	...
14	...	...	210	215	210	210	200	200	200	195	200	...	...
15	...	...	220	200	195	205	195	295	200	200	220	...	...
16	...	...	...	215	p210c	p200c	190	200	190	200	220	...	...
17	...	...	...	200	180	p190c	p190c	195	200	210	220	...	...
18	...	...	220	200	195	190	200	200	190	200	215	...	...
19	...	...	220	205	200	200	200	195	195	205	220	...	...
20	...	...	200	200	190	200	200	200	200	190	...	...	...
21	...	...	230	220	200	195	190	200	195	200	210	...	...
22	...	...	210	205	195	200	195	200	200	200	235	...	...
23	...	...	225	210	210	200	200	210	200	205	225	...	...
24	...	...	...	200	200	190	190	p200c	p200c	200	190	...	...
25	...	...	215	200	190	200	180	190	185	190	200	...	...
26	...	...	210	200	200	200	190	190	200	200	210	...	...
27	...	...	220	200	210	210	200	210	200	190	200	...	...
28	...	...	p220c	210	200	200	205	200	210	200	200	...	...
29	...	...	220	200	200	200	200	205	200	190	200	...	...
30	...	...	210	210	200	200	200	200	200	200	200	...	...
31													
MEAN*	...	222	214	204	199	198	195	200	194	197	208	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 314

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.9	1.1	1.2	1.2	1.3	1.3	1.3	1.4	1.2	1.2	1.2	1.0	0.8
2	1.0	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.4	[illegible]	1.2	1.0	0.8
3	0.8	1.0	1.2	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.2	1.2
4	1.0	0.8	1.0	1.3	1.3	1.3	1.3	1.3	1.3	p1.3c	p1.2c	1.4	0.8
5	0.9	1.1	1.1	1.3	p1.3c	1.3	p1.3c	1.3	1.3	1.3	1.2	1.0	1.0
6	0.9f	1.0	p1.2c	1.2	1.3	1.3	1.3	1.4	1.3	1.3	1.3	1.2	1.1
7	1.0	1.0	1.2	1.2	1.2	1.3	1.3	1.2	1.3	1.3	1.2	1.1	1.0
8	1.0	1.1	1.2	1.3	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.0	1.0
9	0.7	1.0	1.2	1.3	1.3	1.4	p1.3c	1.4	1.4	1.3	1.3	1.2	1.2
10	1.0	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.3	1.3	1.2	1.0	1.0
11	1.0	1.2	p1.2c	1.2	1.3	1.4	1.3	1.4	1.4	1.3	1.3	1.1	0.8
12	1.0	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.4	1.3	1.2	1.0	p1.0c
13	1.0	1.2	1.3	1.3	1.4	1.3	1.4	1.3	1.3	1.3	1.3	1.2	1.0
14	0.9	1.2	1.3	1.3	1.4	p1.4c	1.4	1.4	1.4	1.2	1.2	1.0	[illegible]
15	1.0	1.2	1.4	1.2	1.2	1.4	1.3	1.2	1.2	1.2	0.8	0.8	0.8
16	...c	...c	...c	1.3	p1.3c	p1.2c	1.3	1.3	1.2	1.2	1.1	1.0	0.8
17	...c	...c	...c	1.2	1.2	p1.3c	p1.3c	1.2	1.2	1.2	1.0	1.0	0.9
18	0.7	1.0	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.0	0.9	0.8
19	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.3	1.2	1.1	1.0	0.9	0.8
20	1.0	1.0	1.1	1.2	1.3	1.3	1.2	1.3	1.2	1.1	p1.0c	0.8	0.9
21	0.8	1.0	1.2	1.2	1.3	1.3	1.2	1.3	1.3	1.3	1.2	1.0	1.0
22	0.9	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.0	1.0	p1.0c
23	0.8	1.0	1.1	1.2	1.3	1.2	1.3	1.2	1.2	1.2	1.0	0.9	1.0
24	...c	...c	...c	1.2	1.2	1.2	1.2	1.4	1.3	1.2	1.2	1.1	...c
25	0.8	1.1	1.2	1.2	1.3	1.3	1.3	1.2	1.3	1.2	1.2	1.1	1.2
26	0.9	1.0	1.2	1.3	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.0	1.0
27	0.8	1.2	1.1	1.2	1.2	1.4	1.3	1.3	1.2	1.3	1.1	1.0	1.0
28	p0.9c	p1.1c	p1.2c	1.3	1.4	1.3	1.4	1.3	1.3	1.3	1.0	1.1	0.9
29	0.9	1.0	1.2	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.2	1.0	1.0
30	1.0	1.1	1.2	1.3	1.3	1.3	1.4	1.2	1.3	1.3	1.0	1.0	0.9
31													
MEAN*	0.9	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.0	1.0

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	2.3	2.8	3.0	3.2	3.4	3.4	3.4	3.2	2.8	2.5	1.7	1.0
2	1.2	2.3	2.6	2.9	3.2	3.4	3.4	3.4	3.0	2.8	2.4	1.9	1.0
3	1.2	2.3	2.7	3.1	p3.2c	3.4	p3.2c	3.1	3.0	2.9	2.6	2.0	1.4
4	1.1	2.2	2.6	3.0	3.2	3.4	3.4	3.2	3.2	p2.8c	p2.5c	2.0	1.0
5	1.2	2.2	2.7	3.0	p3.2c	3.4	3.4	3.4	3.2	2.8	2.5	1.8	1.0
6	1.4f	2.2	p2.5c	3.0	3.0	3.4	3.4	3.4	3.1	2.9	2.1	1.9	1.1
7	1.4	2.2	2.8	3.0	3.3	3.4	3.4	3.3	3.2	2.8	2.4	1.9	1.0
8	1.4	2.3	2.8	3.1	3.4	3.5	3.4	3.4	3.2	2.9	2.5	1.9	1.1
9	1.2	2.2	2.6	3.2	3.4	3.4	p3.4c	3.4	3.2	3.0	2.4	2.0	1.2
10	1.1	2.3	2.8	3.2	3.3	3.4	3.4	3.4	3.1	2.8	2.6	2.0	1.2
11	1.2	2.2	p2.8c	3.0	3.2	3.4	3.5	3.4	3.2	2.9	2.5	2.0	1.1
12	1.2	2.3	2.8	3.2	3.3	3.4	3.4	3.4	3.2	2.9	2.4	2.0	p1.0c
13	1.4	2.3	2.9	3.2	3.4	3.5	3.6	3.4	3.1	2.9	2.2	2.4	1.6
14	1.2	2.3	2.8	3.1	3.3	3.4	3.4	3.4	3.2	2.8	2.4	2.0	1.1
15	1.4	2.3	2.7	3.0	3.2	3.3	3.2	3.1	3.0	2.8	2.5	1.8	1.0
16	...c	...c	...c	3.0	p3.2c	p3.2c	3.3	3.1	3.0	2.8	2.5	1.8	1.0
17	...c	...c	...c	2.8	3.0	p3.2	p3.4	3.2	3.2	2.8	2.4	1.9	1.0
18	1.1	2.3c	2.8	2.9	3.0	3.2	3.2	3.1	3.0	2.8	2.4	1.8	1.0
19	1.4	2.2	2.8	3.0	3.1	3.2	3.2	3.2	3.0	2.9	2.4	2.0	0.9q
20	1.2	2.2	2.5	2.9	3.0	3.2	3.3	3.2	3.0	2.8	p2.4	1.6	1.0
21	1.0	2.2	2.8	3.0	3.2	3.4	3.3	3.2	3.2	2.8	2.4	2.4	1.0
22	1.1	2.2	2.6	2.6	3.0	3.2	3.3	3.0	3.3	2.8	2.6	1.7	p1.0c
23	1.2	1.8	2.6	3.0	3.1	3.2	3.2	3.3	3.0	2.7	2.6	1.8	...
24	...b	...b	...b	2.9	3.0	3.2	3.1	p3.2c	p3.0c	2.8	2.4	1.7	...c
25	1.0	2.2	2.5	2.8	3.0	3.3	3.3	3.2	3.0	3.0	2.6	2.0	1.2
26	1.0	2.0	2.6	2.8	3.2	3.3	3.4	3.2	3.1	2.8	2.6	1.9	1.0
27	1.0	2.2	2.8	2.9	3.4	3.4	3.3	3.3	3.1	2.8	2.4	1.8	1.0
28	p1.0c	p1.7c	p2.7c	3.0	3.2	3.2	3.2	3.2	3.0	2.8	2.6	2.1	0.9
29	1.1	1.4	2.6	3.0	3.1	3.2	3.4	3.3	3.1	2.8	2.5	1.8	1.0
30	1.0	2.1	2.6	3.1	3.2	3.4	3.4	3.2	3.0	2.8	2.4	2.0	0.9
31													
MEAN*	1.2	2.2	2.7	3.0	3.2	3.3	3.3	3.3	3.1	2.8	2.5	1.9	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 315

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1944 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JULY 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	5.0f	p4.8f	p4.0f	p3.5f	2.9	2.6f	2.1f	4.5	5.0	5.2	5.4	4.8	p5.2	5.5	5.5	5.2	p5.8	p5.7c	p4.9c	p4.8c	p5.1c	p5.3c	p5.2c	p4.2c	4.7
2	3.6	...f	...f	...f	...f	...f	2.1f	p4.8c	p5.7	p7.3c	p6.4c	p5.4c	5.2	6.5	6.0	5.8h	5.5	6.1	...a	4.9	5.1	5.3	5.0	4.2	...
3	3.4	p3.7f	...f	...f	p2.3f	...f	2.1	4.3	5.0	5.5	5.8	5.9	5.6	5.6	5.5h	6.0	6.3	6.2	5.9	p5.3c	p5.0c	p4.8c	4.0	3.7	...
4	3.2	2.3	2.3	2.2	p1.7b	p1.0b	1.9	3.8	4.7	5.6	5.4	p5.0h	p5.3h	5.2	5.5	6.4	6.2	p6.5c	p6.8c	p5.5c	p4.8c	p4.0c	3.3	p2.1c	4.2
5	...c	...c	...c	...c	...c	...c	...c	...c	...c	5.3	p5.0c	...c	...c	...c	...c	...c	...c	p5.5c	p6.2c	p5.5c	4.1	4.1	1.8b	1.5b	...
6	1.6b	p1.5b	...c	...b	...b	...b	2.2	4.0	5.5h	5.5h	5.0h	5.5	5.1	5.2	5.2	5.5	5.9	5.8	p6.2c	p5.4c	p5.0c	p4.9c	4.5f	p4.7f	...
7	p4.5f	4.0f	p3.5f	p2.7f	p2.4f	...f	p2.2f	4.8	6.1	6.1	5.8	5.6	5.9	6.7	5.8	6.0	6.8h	6.8	6.5	p5.9c	4.4	p3.3c	2.7	2.7	...
8	2.3	1.8	p1.7f	...f	...f	...f	2.2	4.3	5.4h	5.2	4.8	5.9h	5.4	5.6h	5.7	5.0	5.7	6.1	6.1	5.3	4.8	p4.9c	5.0	4.0	...
9	3.2	2.7f	...f	...f	p2.2f	p2.0f	2.4	5.3	6.0	p5.6	5.3	5.8h	6.0	6.0	6.1	6.2	6.0	6.1	6.0j	5.5	p5.0c	6.1	5.5j	4.1	...
10	2.9	2.5	...f	p2.3f	...f	...f	2.4	4.7	p5.6h	5.4	5.8h	5.5	5.6h	5.4	5.3	5.1	5.5	5.5	5.8	4.8	4.4	5.6	4.3	3.3	...
11	3.2	2.4	2.9	2.6f	...f	...f	2.3	4.9	5.0	6.6	6.0	5.4	5.0	5.5	6.1	6.2	5.8	7.2	p7.0c	...c	...c	...c	...c	...c	...
12	...c	...c	...c	...c	...c	...c	...c	...c	...c	5.8	5.4	5.8	5.0	5.0	5.8	5.9	p5.8h	7.2	6.7	5.1	4.6	5.0	5.0	3.5	...
13	2.9	2.7	2.3	...f	...f	p1.9f	p2.0f	4.6	5.5	6.0h	5.6	5.9	4.9	5.6	5.8	5.8h	5.7	6.0	6.7	p5.0c	p5.0c	4.2	4.2	3.4	...
14	2.9	2.3	2.3	1.8	1.9b	1.5b	2.4	4.8	5.7	6.3	5.7	p5.4c	5.4	6.1	p5.4c	6.7	6.1	5.5	5.5	5.6	5.0	p4.7c	4.2	4.3	4.5
15	3.3	3.4	2.9	2.7f	2.6f	2.4	2.9	4.4	7.0	6.5	p5.8c	5.5	...b	p5.6c	5.5	5.8	6.1j	6.6	6.7	5.5	p6.3c	5.3	4.0	3.1	...
16	2.2	2.6	...f	...f	...f	...f	2.2	4.3	5.7	5.7	6.0	p5.8c	5.6	5.5	5.0	5.0	5.2	5.5	p6.2	p5.0	4.0	2.8	1.6	1.8	...
17	2.2	2.4f	...f	...f	...f	...f	2.3	5.0	6.8	6.8	6.5	5.5b	5.6b	5.5b	5.7b	p5.8b	5.6	p6.4c	p5.8	p5.5	p5.4	p4.7	4.0	4.1	...
18	4.3	3.8	3.3	3.0	2.6	2.0	2.2	4.8	6.2	6.7	7.2	p7.5	6.7	5.2h	4.9h	5.3	5.5	p6.3	p5.7c	p5.1c	p4.5c	p4.7c	4.1	4.3	4.8
19	3.9	2.5	2.2	2.6	1.9	1.9	2.7	5.0	5.6	6.4	6.8	p6.0c	6.6h	6.7	5.6h	6.3h	5.8	5.9	p5.2c	p4.6c	p4.6c	p4.7c	4.6	4.4	4.7
20	4.2	4.3	4.8	3.9	2.3	1.4	2.7	4.9	5.7	6.1	6.3	6.3	5.5	5.3	5.6	5.6	6.1	6.3	...c	. a	p4.8c	p4.1c	4.9	4.2	...
21	3.8	3.9	4.5	4.0	3.4	2.7	2.9	5.0	6.0	5.8	6.2	5.7	5.5	5.7	5.5	5.7	6.0	p5.7c	p6.3c	p5.0c	p5.0c	p5.1c	5.2	4.0	4.9
22	3.9	4.0	3.7	3.6	3.0	2.4f	2.0f	4.5	p5.2c	5.9	5.6h	5.2	5.5	5.5	5.2	5.2	5.3	5.2	p5.1c	5.5	p5.5c	5.5	5.2	4.7	4.7
23	4.1	p3.8	...c	...c	...a	...a	2.1f	4.4	5.3	5.8	5.4	5.4	5.7	6.8	7.1	7.4	6.7	6.5	6.8	6.1	...f	p5.1	5.0f	4.6	...
24	5.1	4.5	4.1	3.6	3.1	2.6	2.2	4.6	5.8	6.1	5.2	p5.2c	5.2	5.0	5.7	6.3	5.8	6.3	p6.2c	4.9	4.9	4.5	5.0	p4.3f	4.8
25	p4.3f	p4.4f	4.4	4.7	3.7	2.9	2.9	4.7	5.7	5.7c	5.2	5.0	p5.2c	5.4	5.8	5.6	6.0	5.8	5.2	...a	5.2	5.2	5.1	4.3	4.7
26	4.2	4.3f	3.5f	...f	2.3	1.5	2.6	5.2	6.3	6.2	5.2	5.8h	5.6	5.8	5.7	5.2h	5.3	6.2	5.6	4.7	4.0	...f	p2.2f	...f	...
27	...f	...f	...f	...f	...f	p2.2f	2.2f	4.2h	5.4	5.7	5.1	5.2	5.7h	5.4	5.7	5.6	5.9	5.5	5.6	p6.3c	6.8	5.8	5.4	4.7	...
28	4.4	4.9	5.4	3.6	2.1	1.6	2.2h	4.5	5.2	5.6	5.6	5.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	4.0	...
29	3.8	3.7	4.1	3.2	2.7	2.4	2.1f	4.2	5.4	5.4	5.2	5.9	6.0	6.5	5.6	6.4	6.0	5.6	5.0	6.4	4.5	4.9	4.9	4.6	...
30	4.5	4.6	2.8	2.1	1.7	1.2	2.3	4.5	5.2	5.6	5.8	5.8	5.6	5.5	5.6h	6.9	6.2	5.7	5.7	5.6	4.6	4.7	6.1	...f	...
31	3.9f	5.0f	...f	...f	...f	3.2	3.6	p5.1c	p5.7c	6.1	5.5	6.1	p6.2c	p6.4c	6.2	7.3	6.3	6.7c	6.2	6.9	5.2	p5.2c	5.3	3.7	...
MEAN*	3.6	3.4	3.4	3.1	2.5	2.1	2.4	4.6	5.6	5.9	5.7	5.6	5.6	5.7	5.7	5.9	5.9	6.1	6.0	5.4	4.9	4.6	4.4	3.8	4.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 316

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1944 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS JULY 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	240	240	230	250	250	270	250	230	350	320	420	440	q530	420	420	420	q320	230	270	290	250	220	210	230	304
2	250	290	270	250	250	270	260	220	280	280	350	360	420	380	380	370	330	230	...a	290	280	250	240	260	...
3	280	300	270	290	280	300	260	230	380	420	350	380	420	460	470	370	200	220	270	280	270	230	220	230	308
4	230	230	250	240	230	320	260	230	400	380	420	430	500	430	410	360	190	230	250	260	240	220	210	p230c	298
5	...c	...c	...c	...c	...c	...c	...c	...c	...c	430	q380c	...c	...c	...c	...c	...c	...c	250	250	240	230	220	240	270	...
6	270	300	280	...b	...b	...b	270	240	370	370	380	440	500	420	450	390	330	230	250	240	240	240	250	260	...
7	260	260	280a	300a	280a	240a	260	240	300	300	380	400	400	330	400	400	330	220	230	240	230	230	240	230	291
8	230	300	270	240	270	310	250	230	340	390	460	500	470	480	380	400	350	230	250a	300	240	q230c	220	230	315
9	240	280	280	260	250	300	250	230	240	390	440	500	400	420	400	360	300	240	260	390	270	250	220	230	308
10	250	250	...a	250	290	310	260	250	340	450	370	430	560	430	440	400	330	260	260	280	310	250	230	240	...
11	230	250	250	300	300	280	280	240	220	360	400	530	530	500	350	360	230	240	p280	...c	...c	...c	...c	...c	...
12	...c	...c	...c	...c	...c	...c	...c	...c	...c	400	460	420	470	570	360	300	390	250	270	310	310	250	230	240	...
13	240	250	250	240	230	270	260	230	390	380	410	400	210	450	390	390	315	235	240	245	p250c	240	220	240	291
14	245	240	240	250	220b	270b	260	240	220	360	420	p440c	400	410	p460c	390	330	230	250	240	220	215	240	250	293
15	250	235	250	280	260	260	270	230	330	370	400	450	p570b	p400c	480	360	390	230	230	240	250	225	240	240	310
16	250	280	250	250	250	270	260	240	220	390	420	p370c	410	360	460	470	340	230	230	220	230	230	270	250	298
17	240	250	...f	350	400	350	270	230	300	330	360	420b	360b	470b	430b	370	340	230	230	240	250	230	240	250	...
18	220	210	230	250	250	270	250	220	280	320	330	340	390	470	530	400	340	230	250	250	240	230	240	230	290
19	210	330	240	240	250	260	250	220	280	300	330	370	380	400	480	350	400	230	260	270	260	260	240	230	293
20	220	250	220	210	230	260	240	220	280	290	340	430	420	420	450	410	300	220	250	260	260	230	230	250	287
21	260	240	250	240	240	240	260	220	250	320	340	400	420	430	400	400	360	220	250	250	270	240	220	230	290
22	230	230	250	240	250	260	260	220	p270c	380	410	400	460	430	410	450	370	210	270	250	q260c	270	260	220	302
23	220	230	260	280	270	260	260	230	300	330	410	390	370	360	360	320	300	220	250	290	280	270	250	240	290
24	230	220	210	230	240	290	250	230	330	350	390	p420c	460	450	370	370	310	210	250	270	290	260	230	230	295
25	220	220	240	240	230	240	250	230	320	370	420	490	450	460	400	410	360	240	250	p250c	250	240	240	240	302
26	250	240	230	220	230	230	250	220	280	380	410	450	350	400	380	300	380	230	250	290	330	310	280	240	297
27	250	250	240	240	240	230	250	230	310	420	370	480	450	470	400	400	320	230	250	240	230	240	240	240	301
28	240	220	200	210	230	240	250	220	350	380	380	450	...c	...c	...c	...c	...c	220	250	240	230	230	210	220	...
29	220	230	220	220	230	260	250	220	320	330	440	400	390	410	370	400	310	230	240	230	230	240	240	240	286
30	230	200	220	220	230	270	260	230	210	360	370	400	440	430	360	330	340	250	250	270	270	270	230	230	286
31	220	220	230	240	240	250	250	p230c	p280c	320	350	400	410	370	420	330	340	230	240	240	240	240	230	260	282
MEAN*	239	250	245	251	254	271	257	229	301	360	391	424	432	429	414	379	326	231	251	264	257	242	235	239	299

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 317

JULY 1944 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — JULY 1944

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.0	4.1	4.0	4.2	q4.3	4.2	4.2	4.3	q3.9	...	...
2	...	...	3.9	4.0	4.2	4.2	4.3	4.2	4.1	4.0	4.2h	...	...
3	...	...	3.8	4.0	4.0	4.1	4.2	4.1	4.4h	3.9	...	...	...
4	...	...	3.9	4.0	4.2	4.3	4.2	4.1	4.0	4.0	...	...	...
5	...	...	p3.9c	4.0	4.0	...c	...c	...c	...c	...c	...c	...	...
6	...	...	4.0	4.0	4.2	4.2	4.2	4.2	4.1	4.0	3.8	...	...
7	...	...	4.0	4.0	4.2	4.2	4.2	4.1	4.1	4.0	3.7	...	...
8	...	...	4.0	4.2	4.2	4.2	4.2	4.2	4.0	4.1	3.7	...	...
9	...	...	...	4.2	4.1	4.2	4.2	4.2	4.2	4.1	3.9	...	...
10	...	...	4.0	4.2	4.2	4.2	4.2	4.2	4.1	3.9	3.9	...	...
11	...	...	...	4.0	4.2	4.3	4.2	4.1	4.1	4.0	...	...	...
12	...	...	p4.0c	4.2	4.1	4.2	4.2	4.1	4.1	3.9	3.9	...	...
13	...	...	4.2	4.0	4.1	4.2	...	4.2	4.0	4.2	3.9	...	...
14	...	...	...	4.2	4.1	p4.2c	4.2	4.2	p4.1c	3.9	3.9	...	...
15	...	...	3.9	4.3	4.3	4.3	...b	4.2	4.3	4.1	q4.0c	...	...
16	...	...	...	4.0	4.2	p4.3c	4.2	4.2	4.2	4.2	3.8	...	...
17	...	...	3.8	4.1	4.1	4.2b	4.2b	4.3b	4.2b	4.1	3.8	...	...
18	...	...	3.8	4.1	4.3	4.2	4.3	4.2	4.1	4.0	3.7	...	...
19	...	...	3.9	4.0	4.1	4.3	4.3	4.2	4.3	4.0	4.1	...	...
20	...	...	3.8	4.0	4.1	4.2	4.2	4.2	4.1h	3.9h	3.8	...	...
21	...	...	3.8	4.0	4.1	4.2	4.1	4.1	4.1	4.0	3.8	...	...
22	...	...	p3.9c	4.1	4.1	4.1	4.3	4.2	4.1	4.0	3.8	...	...
23	...	...	3.9	4.1	4.1	4.2	4.2	4.2	4.1	4.0	3.7	...	...
24	...	...	4.0	4.0	4.1	p4.2c	4.3	4.2	4.1h	4.0	3.8	...	...
25	...	...	3.9	4.1	4.2	4.2	4.3	4.3	4.2	4.1	3.8	...	...
26	...	...	4.2	4.0	4.1	4.2	4.2	4.3	4.0	3.8	3.9	...	...
27	...	...	3.9	4.0	4.1	4.2	4.2	4.2	4.0	4.1	3.8	...	...
28	...	...	4.0	4.1	4.2	4.3	p4.2c	4.2	...c	...c	...c	...	...
29	...	...	4.0	4.1	4.3	4.3	4.3	4.3	4.1	4.0	3.8	...	...
30	...	...	...	4.2	4.2	4.3	4.4	4.2	4.1	3.9	4.2	...	...
31	...	...	p4.0c	4.1	4.2	4.3	4.5	4.2	4.1	4.0	4.1	...	...
* MEAN	...	...	3.9	4.1	4.2	4.2	4.2	4.2	4.1	4.0	3.9	...	...

MINIMUM VIRTUAL HEIGHT OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	210	190	190	200	q200	180	200	190	200	...	...
2	...	...	210	200	200	200	200	190	190	190	190	...	...
3	...	...	200	190	200	200	190	200	190	210	...	...	...
4	...	...	200	200	200	190	200	200	200	200	...	...	...
5	...	...	p210c	190	200	...c	...c	...c	...c	...c	...	...	...
6	...	...	210	210	190	200	190	190	190	190	190	...	...
7	...	...	220	200	200	200	200	200	...a	200a	220	...	...
8	...	...	220	200	200	190	200	200	190	200	215	...	...
9	...	...	...	210	220	215	210	200	200	220	210	...	...
10	...	...	220	210	210	200	220	215	200	200	210	...	...
11	...	...	...	200	200	210	200	200	200	220	...	...	...
12	...	...	p220c	210	210	200	200	200	200	190	230	...	...
13	...	...	220	230	215	200	...	200	200	200	215	...	...
14	...	...	...	210	200	p200	210	210	200	200	210	...	...
15	...	...	225	200	200	200	200	200	200	200	210	...	...
16	...	...	...	210	210	p200c	190	190	190	200	200	...	...
17	...	...	220	210	200	200b	200b	190b	210	200	200	...	...
18	...	...	220	210	200	200	200	200	200	200	200	...	...
19	...	...	210	201	190	190	190	200	200	200	200	...	...
20	...	...	220	210	230	190	190	190	200	190	200	...	...
21	...	...	210	210	200	200	190	200	200	200	200	...	...
22	...	...	...c	200	190	190	200	200	200	190	190	...	...
23	...	...	220	230	210	200	200	200	200	190	200	...	...
24	...	...	220	210	210	200	200	190	190	190	200	...	...
25	...	...	220	200	210	190	200	200	200	180	190	...	...
26	...	...	210	210	210	200	200	190	190	200	190	...	...
27	...	...	210	210	200	200	200	190	190	180	210	...	...
28	...	...	200	190	200	190	p200c	200	p190c	180	190	...	...
29	...	...	210	200	210	200	200	190	200	200	190	...	...
30	...	...	...	200	200	200	200	200	200	190	190	...	...
31	...	...	p210c	200	200	200	200	190	200	200	200	...	...
* MEAN	...	...	214	205	203	198	199	197	197	197	203	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f°F2 EQUAL TO OR LESS THAN f°F1   h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 318

JULY 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1944

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.9	1.1	1.3	1.3	1.4	1.3	q1.3	1.3	1.4	1.3	1.3	1.2	...c	1.1	q1.8	2.7	3.0	3.4	3.4	q3.5	3.4	3.4	2.9	2.4	2.2	1.0
2	0.9	1.1	1.2	1.3	1.2	1.4	q1.8	1.3	1.2	1.2	1.2	1.1	0.8a	0.9	p1.9c	2.7	3.2	3.3	p3.4c	3.4	3.3	3.1	2.7	2.4	1.9	...a
3	1.0	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.1	...b	1.0	2.0	2.6	2.8	3.0	...	...	...	3.0	2.7	...	1.9	...
4	q1.2	1.0	1.2	1.2	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.1a	...	...b	...	3.0	...	...	...	...	3.0	2.7	2.4	2.0	...a
5	...c	...c	...c	1.2	q1.3c	...c	...c	...c	...c	...c	...c	1.2	...	...c	...c	...c	2.7	3.0	...c	...c	...c	...c	...c	...c	...c	...
6	0.7	1.1	1.1	1.2	1.3	1.2	1.3	1.3	1.3	1.2	1.2	1.0	...	1.0	...a	2.6	3.0	...	...	3.2	...	3.2	2.9	2.4	2.0	...
7	0.7	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.3	1.1	1.0	q2.2a	2.7h	3.0	3.1	...	...	...	...	2.8h	2.5h	2.0h	...
8	0.8	1.0	1.1	1.2	1.2	1.3	1.3	1.3	1.2	1.2	1.0	1.0	1.0	0.9	2.1	2.7h	3.0	3.0	...	...	...	3.0	2.8	2.4	1.8	...
9	1.0	0.9	1.0	1.2	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.1	q0.9	1.0	2.1	2.6	3.0	...	...	...	q3.2	3.0	2.9	2.5	1.8	...
10	0.9	1.0	1.1	1.2	1.3	q1.8	1.3	1.3	1.3	1.2	1.1	1.0	...a	q0.8	2.2	2.6	2.9	...	...	...	3.2	3.0	2.8	q2.7h	2.1	...
11	1.0	1.0	1.2	1.3	1.3	1.4	1.3	1.3	1.2	1.2	1.2	1.2	...c	1.0	2.0h	2.8	3.0	3.1	...	...	q3.2	3.0	2.9h	2.5h	1.9h	...
12	...c	...	...e	1.3	1.3	1.4	q1.5c	1.4	1.4	1.3	1.2	1.0	1.0	...c	...	...c	...	...	...	...	3.2	3.0	2.8	2.5	2.2	...
13	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.3	1.3	1.3	1.0	1.1	...	...	2.2	2.6	3.0h	3.1	3.2	...	3.2	3.0	2.8	2.6	2.0	...
14	...	1.0	1.2	1.2	1.3	p1.2c	1.3	1.4	1.3	1.3	1.2	1.1	1.1	...	2.3	2.7	3.0	3.2	p3.2c	...	...	3.0	2.8	2.5	2.0	...
15	0.6	1.0	1.1	1.3	1.3	1.4	1.4	1.4	1.3	1.3	1.2	1.2	1.1	...a	2.0	2.6	q3.0c	q3.3c	...	...	...	...	2.9	2.5	2.0	...
16	0.8	1.0	1.2	1.3	1.4	p1.3c	1.3	1.3	1.4	1.2	1.2	1.2	...	...	1.8	2.7	...	3.2	...	...	...	...	2.9	2.4	2.0	...
17	1.0	1.2	1.1	1.2	1.3	1.2b	2.0b	1.4b	1.8	1.2	1.2	1.2	...	...	2.2	2.6	2.9	3.2	3.4b	...	3.4b	...	2.9	2.5	2.0	...
18	2.0	1.2	1.0	1.2	1.8	1.3	1.3	1.2	1.3	1.3	1.2	1.2	...	...	2.3h	2.7h	3.0h	...h	...	...	...	...	2.9	2.6	2.0	...
19	0.8	1.0	1.2	1.3	1.3	1.3	1.4	1.3	1.3	1.4	1.2	1.0	1.0	...	2.2h	2.6h	2.9h	3.1h	...	...	...	3.1	2.4	2.6	2.0	...
20	0.6	1.0	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.2	1.2	1.1	...	...	2.2h	2.7h	3.1h	...h	1..	...	...	...	2.8	2.5h	...	...
21	0.9	1.2	1.2	1.3	1.2	1.3	1.7	1.2	1.2	1.2	1.1	1.0	...	...	2.2	2.7h	...	...	...	...	3.3	...	2.9	2.4	2.0	...
22	0.8	1.0	p1.1c	1.2	1.7	1.7	1.7	1.8	1.3	1.3	1.2	1.0	1.0	...	2.1	...c	...	3.1	...	...	...	3.1	2.9	2.5	...	...
23	0.7	1.2	1.3	1.7	1.2	1.3	1.4	1.3	1.3	1.2	1.2	1.0	...	2.0	2.2	2.6	3.0	3.2	...	...	...	3.0	2.8	2.4	1.8	...
24	0.7	1.0	1.0	1.2	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.0	...	...	2.1	2.7	3.0	...	...	...	...	3.0	3.0	2.5	2.0	...
25	1.0	1.0	1.0	1.2	1.8	1.8	1.8	1.8	1.2	1.2	1.0	0.9	0.9	...	2.2	2.6	3.0	...	...	...	...	...	3.0	2.5	2.2	1.0
26	0.9	1.0	1.0	1.2	1.2	1.2	1.4	1.8	1.4	1.2	1.0	0.9	0.9	...	2.1	2.6	3.0	...	...	...	...	...	...	2.5	2.0	1.0
27	0.9	1.0	1.0	1.1	1.2	1.8	1.4	1.8	1.3	2.0	1.0	1.0	1.0	...	...	2.7	3.0	...	...	...	...	...	2.9	2.6	1.9	1.0
28	0.8	1.0	1.0	1.2	1.8	1.8	p1.8c	1.8	...c	...c	...c	1.0	...	1.0	...	2.6	3.0	...	...	...c	...c	...c	...c	...c	2.1	...
29	0.9	1.0	1.1	1.2	1.7	1.8	1.8	1.8	1.8	1.2	1.0	1.0	...	1.0	2.1	...	3.0	...	...	...	...	...	3.0	1.5	2.0	...
30	0.8	0.9	1.0	1.6	1.8	1.8	2.0	1.8	1.8	1.2	1.0	1.2	...	1.0	...	2.6	3.0	...	...	...	...	3.0	2.6	...	...	...
31	0.9	p1.0c	p1.0c	1.2	1.8	1.8	1.8	1.8	p1.8c	1.2	1.0	1.0	0.9	...	p2.2c	p2.6c	3.1	...	...	...	...	...	...	...	...c	...
* MEAN	0.9	1.0	1.1	1.3	1.4	1.4	1.5	1.4	1.4	1.3	1.2	1.1	1.0	1.0	2.1	2.7	3.0	3.2	3.3	3.4	3.3	3.1	2.8	2.5	2.0	1.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 319

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1944 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — AUGUST 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...c	...c	...c	...c	...c	1.3f	p3.2c	4.9	6.1	6.4	6.1	6.0	[illegible]	5.0	5.9	6.4	6.5	6.4	6.8	p5.7c	[illegible]	[illegible]	[illegible]	4.5	...
2	4.1	3.4	3.3f	2.8f	2.0	...a	2.8f	4.8	6.1	6.7	[illegible]	6.5	5.7	...c	[illegible]	6.5	7.2h	p6.5c	p5.9c	[illegible]	...f	...f	...f	...f	...
3	...f	...f	...a	3.1f	2.8f	...f	2.7	4.6c	5.6c	5.7	5.6	5.5	...c	...c	...c	5.6c	5.9	5.8	4.9	4.6	4.0	p3.9c	...c	...c	...
4	...c	...c	...c	...c	...c	...c	...c	...c	...c	[illegible]	5.5	5.2c	5.5h	p5.0c	6.3	6.3	[illegible]	5.9	[illegible]	6.5c	5.2	4.9	3.7	3.4	...
5	3.5f	3.5f	...f	3.5f	[illegible]	p2.3c	...c	...c	...c	[illegible]	5.2	p4.7h	[illegible]	5.2	5.3	5.2h	[illegible]	6.5	6.2j	4.9	5.5	4.6	5.0c	4.5f	...
6	4.1f	...f	...f	2.8f	p2.0c	1.3	2.5	4.7	5.4	5.4	5.2	p5.1c	p5.2c	6.4	6.2	5.5	5.5	6.8	6.2	5.6	6.1	[illegible]	5.4	4.9	...
7	p4.6c	4.1	3.2	2.2	1.4b	p1.2b	2.7	5.1	5.9	5.1h	[illegible]	[illegible]	...c	...c	...c	6.1	6.6	6.7	6.9c	[illegible]	p5.2c	[illegible]	4.6	3.0	...
8	2.9	3.0	2.1f	p1.9f	1.9f	1.4b	2.7	5.1	6.2	6.7	[illegible]	5.2h	5.0	5.3h	5.8	5.9	6.0	6.8	6.6	5.8	5.7	5.0	6.1	2.3	4.6
9	2.4	1.9	1.1b	1.2b	1.2b	...b	2.8	5.2	6.0	7.2	6.4	5.4a	5.5	5.5	5.5	5.8	6.5	[illegible]	7.5	7.0	5.9	6.0	5.7	4.5	...
10	2.8j	2.8	2.1	1.9f	1.9f	[illegible]	2.7	5.5	6.6	7.3	6.1h	5.8	6.2	7.7	8.0	7.7	8.2	[illegible]	5.5	4.8f	5.2	p5.5f	4.5	4.2	5.1
11	3.8	4.5	4.2	3.3	[illegible]	2.2	3.1	5.3	6.3	6.9	6.8h	6.0	5.4	5.9	6.3	6.5a	6.4	7.0	6.7	[illegible]	5.5	[illegible]	5.0	4.0	5.2
12	p4.4f	5.1	p4.5f	p3.6f	3.1	p2.1a	3.0h	5.5	7.0	7.4	7.3h	6.7	6.1h	6.0h	6.0	6.5	6.8	6.3	5.9	5.0j	p4.6c	...f	p5.6f	4.5	...
13	4.6a	p4.5a	p4.3a	p3.7c	p2.6b	p2.1b	3.0	5.2	6.2	[illegible]	[illegible]	7.0	7.1	p6.3c	...c	...c	...c	...c	...c	6.8	...f	...f	6.3	6.2	...
14	5.8f	5.1	4.1	p3.2c	p2.6c	...c	...c	...c	...c	5.4	5.4	...c	5.6	5.9	5.9	6.1	6.7	5.9	6.3c	6.1c	5.7c	6.0j	6.2j	6.2j	...
15	p5.5c	p4.6c	4.9f	4.3	...c	...c	...c	...c	5.0	6.6	p6.3c	6.0	6.0	6.2	6.5	p6.7c	6.8	[illegible]	7.3c	7.1	6.6	p5.8c	p6.3f	5.9	...
16	p5.0f	p4.6c	p4.3f	p4.1f	3.3f	2.4	2.8	5.1	5.6	5.3	5.6	6.0	5.6	6.3h	6.9	7.1	7.5	6.9	7.0	7.1	6.6	6.1	5.9	5.5	5.5
17	4.1f	4.2f	4.2f	3.6	[illegible]	p2.5f	2.5	4.7	5.9	6.5	6.4	6.0h	6.4	6.5	7.0	7.1	7.0	6.8	7.0	7.0	6.5	p6.2f	...f	p6.6f	...
18	p6.8f	5.6	4.0	2.6b	1.3b	p1.0b	3.1	5.8	6.2	6.6	6.2	6.9h	6.8	6.6	6.8h	7.9	7.7	7.2	7.0	6.6	p6.2f	6.7	7.1	6.6	5.8
19	4.7	3.7	3.4	3.4	2.9	2.7f	2.8	5.4	6.8	7.0	6.5h	6.2	6.0	6.2	6.0	5.9	6.0	6.8	6.8	5.7a	5.4	5.1	5.8	6.5	5.3
20	6.5	6.3	4.2	3.7	3.3	2.5	3.5	6.0	7.0	7.5	6.4h	6.3h	5.9	5.9	6.4	6.6	6.5	6.4	p6.2c	5.7f	5.0f	4.4f	p4.4f	6.0	5.5
21	4.9	6.1	5.4	5.3	4.5	3.5	4.0	6.0	6.9	7.3	7.0	6.1	5.6	5.5	5.5	5.7	5.7	6.5	6.8a	6.3a	6.3	5.6	p5.6f	p6.8f	5.8
22	p5.9f	5.5	4.5	4.1	3.6f	...f	3.1	5.8	6.8	7.2	6.8	6.8	6.7h	6.3	6.2	6.5	6.7	6.6	6.6	6.2	5.9	p5.8f	6.0	6.1	...
23	5.5	3.8	2.6	2.0	1.7	p1.6c	3.2	5.6	6.6	7.1	7.5	7.3	6.9	7.0	7.2	7.4	7.8	8.0	7.8	6.8	6.5	6.5	6.7	p4.6f	5.7
24	...f	5.9f	5.0f	4.8f	4.0f	3.1f	3.9f	6.3	7.4	7.9	8.7	8.6	9.0	8.3	7.0	6.2	6.6	6.7	6.7	6.7	6.1j	6.6	6.0	5.8	...
25	...f	...f	...f	4.2f	3.5	2.7	4.2	6.2	7.3	7.6	7.2	6.7	6.8	6.9	6.8	6.7	6.4	6.2	6.5	6.2a	5.9	5.5f	...a	p5.5f	...
26	5.7	4.7	p4.1f	p3.7f	p3.7f	p3.2f	3.0f	5.5	6.5	...c	...c	...c	...c	...c	...c	...c	p6.4c	6.2	6.7	6.1j	5.9	p5.8c	p6.1f	6.0	...
27	5.9	5.8	...f	5.5f	p5.4f	p4.0f	3.1f	6.2	7.0	7.7	7.4	7.1	6.6	5.9	5.9	6.5	6.7	6.4	7.0	6.8	6.4	6.7	6.2	6.0j	...
28	5.2j	p4.7f	4.7f	3.7f	...f	...a	3.2	5.6	6.9	9.0	8.9	7.9	7.2	6.8	6.8	7.6	7.8	7.4	7.5	7.5	7.8	7.5	7.9	6.8	...
29	5.4	4.7	4.4	3.3	2.8	2.4	3.0	5.6	6.7	6.7	6.5	6.4	6.6	6.6	6.4	6.8	6.9	7.4	7.1	6.5	5.6	6.2	7.4	7.1	5.8
30	5.7	4.3	3.6	2.8	2.0	...c	...c	...c	...c	6.3	5.9	6.2	6.6	6.9	6.8	6.9	6.9	7.3	6.9	6.3	p6.2f	p6.3f	...f	p6.8f	...
31	p6.1f	6.8f	6.0	5.0	3.4	3.1	3.6	6.0	6.5	6.7	6.3	6.7	6.6	6.6	6.8	6.7	6.6	6.6	6.2j	5.6f	5.4f	...f	6.6	5.8	...
* MEAN	4.8	4.6	3.9	3.4	2.8	2.3	3.1	5.4	6.4	6.7	6.4	6.2	6.2	6.3	6.4	6.5	6.7	6.7	6.6	6.2	5.8	5.7	5.8	5.4	5.4

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 320

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1944. MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS AUGUST 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	250	280	240	250	270	p240c	220	320	380	360	400	430	430	410	370	200	240	260	260a	270	230	230	230	292
2	220	240	260	235	240	...a	260	230	320	340	380	430	380	400	q380c	300	330	p330c	p320c	q320c	330	320	260	270	...
3	280	260	280	280	250	280	270	240	350	350	390	420	p430c	q440c	p440c	430	380	240	280	340	q370a	p310c	p280c	q250c	327
4	q250c	q240c	q220c	q220c	q230e	q250c	q240c	p280c	p330c	370	420	400	530h	340	440	340	400	200	250	220	220	220	240	220	295
5	230	220	210	230	220	p230c	...c	...c	...c	430	460	550	p520c	480	410	480	370	220	240	240	240	240	250	240	...
6	250	230	240	230	p230c	260	260	220	390	410	440	q520c	q520c	390	410	440	350	...a	250	270	250	240	230	240	...
7	240	230	270	240	250b	q280b	260	230	350	460	p480c	490	q500c	500	q500c	490	310	...a	230	240	250	250	220	230	...
8	220	240	320	280	220	270	250	230	300	380	p450c	530	530	500	420	360	350	220	250	250	230	230	200	230	311
9	250	290	330b	320b	280b	...b	250	220	300	350	440	500	510	480	450	400	330	230	250	260	270	250	240	220	...
10	240	220	230	280	270	260	250	230	320	360	440	420	420	340	340	310	350	220	270	300	260	250	260	240	295
11	260	250	230	240	230	240	260	230	330	360	380	430	580	410	390	370	340	230	250	290	270	250	230	230	303
12	220	220	230	240	240	...a	260	230	320	330	350	440	430	430	390	350	320	200	280	340	350	290f	230	250	...
13	q270a	...a	230a	230	240b	260b	250	240	330	320	360	370	390	p400c	...c	...c	...c	...c	...c	270	...f	...f	240	230	...
14	240	220	210	230	p240c	...c	...c	...c	...c	440	440	p470c	500	440	410	390	340	220	250	290	280	240	250	240	...
15	p240c	230	230	240	...c	...c	...c	...c	290	350	380	420	430	400	370	360	330	210	230	260	240	250	230	240	...
16	240	p230	210	220	230	240	250	220	220	450	440	400	450	430	370	350	320	240	260	270	270	240	230	220	292
17	240	250	250	240	230	270	250	220	350	350	370	470	400	380	390	370	330	240	220a	280a	290	320	250	240	300
18	230	220	240	220	260	...b	250	240	320	370	430	400	360	430	380	340	320	240	260	290	270	240	220	220	...
19	220	240	240	250	280	290	260	220	320	330	380	400	440	430	450	390	210	240	250	...a	290	270	270	220	...
20	220	220	230	230	220	230	240	230	290	330	330	430	450	410	410	370	360	230	270	340	320	290	260	220	297
21	230	230	230	240	260	280	260	220	290	340	360	380	430	460	460	420	210	240	...a	300a	260	260	240	210	...
22	210	220	240	250	260	240	250	230	310	350	360	390	420	380	390	400	350	230	260	290	300	260	220	220	293
23	220	230	220	250	300	300	250	230	300	310	360	370	390	390	360	350	220	260	270	320	310	270	230	240	290
24	230	230	280	250	240	250	260	230	280	310	340	340	340	360	370	380	350	240	250	260	260	250	240	250	283
25	250	250	220	230	230	240	250	240	290	310	350	410	390	370	360	340	340	240	260	280a	230	260	240	220	283
26	210	220	230	230	250	250	260	230	330	...c	...c	...c	...c	...c	...c	...c	p330c	240	260	290	280	260	240	240	...
27	240	230	240	230	230	240	250	230	310	330	350	340	420	420	460	370	300	230	260	280	260	240	240	220	288
28	230	230	210	240	320	300	260	230	300	320	330	340	400	380	370	330	300	230	260	270	270	250	230	220	284
29	230	220	210	230	250	310	260	240	340	330	380	370	400	390	370	380	310	230	260	320	310	260	210	200	292
30	220	220	220	230	260	...c	...c	...c	...c	370	390	400	380	360	330	300	210	250	270	320	310	230	230	230	...
31	240	250	230	230	260	280	250	230	220	360	370	380	420	340	430	310	330	230	270	330	310	230	210	210	288
MEAN*	235	234	241	242	249	263	254	231	311	360	390	420	440	411	402	372	316	235	258	286	279	257	237	230	298

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 321

AUGUST 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1944

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	3.9	4.1	4.1	4.3	4.3	4.2	4.1	4.1	...	...	...
2	...	...	3.8	4.1	4.2	4.3	4.3	4.3	24.3	3.9	3.8	...	...
3	...	...	4.0	4.1	4.2	4.3	...c	...c	...c	4.1	3.9	...	...
4	...	...	p4.0c	4.0	4.2	4.3	4.4h	4.2	4.3	4.0	4.3h	...	...
5	...	...	p4.0c	4.1	4.2	4.4	p4.3c	4.2	4.1	4.2	3.9	...	...
6	...	...	4.0	4.0	4.3	p4.3c	p4.3c	4.3	4.2	4.1	4.0	...	...
7	...	...	4.1	4.2	p4.2c	4.3	p413c	4.3	p4.2c	4.1	3.8	...	...
8	...	...	4.1	4.1	p4.3c	4.4	4.4	4.3	4.2	4.0	4.1	...	...
9	...	...	4.0	4.2	4.4	4.4	4.4	4.3	4.4	4.2	4.0	...	...
10	...	...	4.0	4.2	4.4	4.3	4.4	4.3	4.2	4.0	4.0	...	...
11	...	...	4.2	4.2	4.3	4.4	4.5	4.4	4.3	4.2	4.1	...	...
12	...	...	4.2	4.3	4.3	4.3	4.3	4.4	4.3	4.2	4.0	...	...
13	...	...	4.1	4.3	4.3	4.4	4.3	p4.4c	...c	...c	...c	...	...
14	...	...	p4.1c	4.2	4.3	4.4	4.5	4.3	4.3	4.2	4.1	...	...
15	...	...	4.2	4.4	4.4	4.4	4.4	4.4	4.3	4.4	4.2	...	...
16	...	...	...	4.4	4.4	4.4	4.5	4.4	4.3	4.3	4.1	...	...
17	...	...	4.1	4.2	4.4	4.5	4.3	4.4	4.4	4.3	4.0	...	...
18	...	...	4.0	4.4	4.3	4.4	4.4	4.6	4.3	4.2	4.0	...	...
19	...	...	4.1	4.2	4.4	4.4	4.5	4.4	4.4	4.2	...	...	...
20	...	...	4.1	4.2	4.4	4.4	4.4	4.4	4.4	4.3	4.1	...	...
21	...	...	4.1	4.3	4.4	4.4	4.4	4.3	4.3	4.2	...	...	...
22	...	..	4.1	4.4	4.4	4.4	4.4	4.4	4.3	4.4	4.0	...	...
23	...	...	4.1	4.4	4.5	4.4	4.4	4.5	4.3	4.2	...	...	...
24	...	...	...	p4.2c	4.5	4.4	4.5	4.4	4.4	4.3	4.1	...	...
25	...	...	4.2	4.4	4.4	4.5	4.4	4.4	4.3	4.3	4.0	...	...
26	...	...	4.3	...c	...c	...c	...c	...c	...c	...c	p4.0c	...	...
27	...	...	4.2	4.4	4.4	4.5	4.4	4.4	4.5	4.2	4.2	...	...
28	...	...	4.2	4.3	4.4	4.4	4.6	4.5	4.4	4.3	4.0	...	...
29	...	...	4.2	4.3	4.3	4.5	4.4	4.5	4.4	4.4	4.2	...	...
30	...	...	p4.2c	4.5	4.4	4.5	4.5	4.4	4.3	4.1	...	...	...
31													
MEAN*	...	...	4.1	4.2	4.3	4.4	4.4	4.4	4.3	4.2	4.0	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	210	200	200	200	210	200	200	190	...	...	...
2	...	...	220	200	200	200	190	190	200	210	200	...	...
3	...	...	220	200	200	190	...c	...c	...c	200	230	...	...
4	...	...	p220c	200	200	200	200	190	220	200	190	...	...
5	...	...	p220c	200	190	200	190	190	200	190	220	...	...
6	...	...	200	200	200	200	200	200	200	190	180h	...	...
7	...	...	220	220	210	200	200	200	190	210	200	...	...
8	...	...	210	220	200	200	200	180	190	190	190	...	...
9	...	...	210	215	205	200	190	180	185	200	220	...	...
10	...	...	215	200	200	200	200	200	200	200	220	...	...
11	...	...	220	210	210	200	200	200	200	190	210	...	...
12	...	...	220	220	210	200	200	200	200	200	200	...	...
13	...	...	220	210	200	190	180	p180c	...c	...c	...c	...	...
14	...	...	p220c	200	210	200	210	200	190	190	200	...	...
15	...	...	210	200	200	190	200	190	200	200	210	...	...
16	...	...	...	200	190	210	200	210	200	200	200	...	...
17	...	...	210	200	210	210	200	190	190	190	210	...	...
18	...	...	210	200	200	190	200	190	190	200	200	...	...
19	...	...	220	200	200	200	200	200	200	190	...	...	...
20	...	...	220	200	200	200	200	190	200	200	200	...	...
21	...	...	210	220	200	190	190	190	190	180	...	...	...
22	...	...	220	200	200	200	200	200	200	190	200	...	...
23	...	...	210	210	210	200	200	190	200	200	...	...	...
24	...	...	...	p220c	220	200	200	200	200	200	200	...	...
25	...	...	210	210	200	200	200	200	200	190	200	...	...
26	...	...	220	...c	...c	...c	...c	...c	...c	...c	p200c	...	...
27	...	...	220	210	200	200	200	200	190	190	200	...	...
28	...	...	220	210	200	190	190	210	200	200	210	...	...
29	...	...	210	200	200	190	200	190	200	190	210	...	...
30	...	...	p220c	210	210	200	200	200	200	190	...	...	...
31													
MEAN*	...	...	216	206	202	198	198	195	197	196	204	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 322

AUGUST 1944 — AUGUST 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	p0.9c	1.0	1.2	1.8	1.7	1.8	1.8	1.8	1.8	1.2	1.1	1.0	0.9a	p1.2c	2.0	2.6	3.0	...	...	...	...	...	3.0	2.4	2.2	...
2	1.0	1.0	1.1	1.7	1.8	1.7	1.8	1.8	2.0	1.7	1.1	p1.0c	p1.0c	1.0f	2.2	...	...	...	...	...	...	...	2.9	2.6	p2.2c	...
3	0.9	0.9	1.0	1.3	2.1	2.0	...c	...c	...c	2.1	1.3	1.0	1.0	...	2.1	2.7	...	...	...	...c	...c	...c	2.9	...	2.2	1.1
4	...c	...c	...c	1.2	1.8	2.1	1.8	1.9	2.0	1.8	1.3	1.0	1.0	...	p2.1c	p2.7c	3.0	...	...	...	3.4	...h	...	2.6	2.0	...
5	...c	...c	...c	1.2	1.8	2.0	2.2	2.0	1.8	1.3	1.2	1.1	0.9	...	p2.1c	p2.6c	2.9	...	...	...	...	...	3.0	2.6	2.0	...
6	0.8	1.0	1.2	1.2	1.8	1.8	1.8	1.8	1.8	1.2	1.2	1.2a	0.9	1.1	2.0	2.6	2.9	...	...	...	...	3.0	2.5	...a	...	...
7	1.0	1.2	1.2	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.4	1.3a	...	1.1	2.2	2.8	3.0	...	...	...	...	...	...	2.7	...a	...
8	1.0	1.2	1.2	1.8	1.8	2.0	2.0	2.0	1.8	1.3	1.3	1.1	...	1.1	2.2	2.7	...	...	...	...	...	...	3.0	2.6	2.1	...
9	1.0	1.2	1.2	1.2	1.4	1.9	1.8	1.8	2.2	2.2	1.8	1.4	...	1.1	2.1	2.6	...	...	...	...	...	...	...	...	2.2	...
10	1.0	1.3	1.4	1.8	1.8	2.0	2.3	2.0	1.8	1.8	1.4	1.3	...	1.2	q2.2c	3.0	3.1	...	...	3.6	...	3.2	3.1	...	2.0	...
11	1.0	1.8	1.8	1.8	2.9	2.0	2.3	2.9	2.4	1.8	1.7	1.8	...	1.2	2.2	...	3.1	...	...	...	...	...	...	...	2.2	...
12	1.0	1.0	1.4	1.8	1.8	2.9	2.9	2.9	2.9	1.8	1.8	1.4	...	1.1	2.2	...	3.1	...	...	...	...	...	...	2.8	2.0	...
13	...	1.8	1.8	1.9	1.8	3.0	1.8	p2.9c	...c	...c	...c	...c	...	1.4	p2.3c	3.0	3.2	...	...	...	...	...c	...c	...c	...c	...
14	...c	...c	...c	1.8	2.0	3.0	...c	...c	...c	2.0	1.9	1.8	...	...c	...c	...c	...	...	...	...	...	...	...	...	...	...
15	...c	...c	1.8	2.0	p2.0c	q3.1	q3.1	q3.1	q3.1	q3.0	2.0	1.8	...	...c	...c	...	3.2	...	...	...	...	...	...	...	...	...
16	1.0	1.4	1.8	1.8	2.9	3.0	3.0	2.9	3.0	1.7	1.8	1.8	...	1.2	p2.5	...	...	...	...	...	...	...	...	...	2.3	1.0
17	1.0	1.4	1.4	1.8	3.0	2.9	3.0	2.9	2.3	1.8	1.8	1.7	1.2a	1.2	2.3	2.8	...	...	...	...	...	...	...	...	2.2	...
18	1.0	1.4	1.8	1.8	2.2	3.0	3.0	3.0	2.9	3.0	1.8	1.7	...	1.2	2.2	2.8	...	...	...	...	...	...	...	3.0	2.3	1.0
19	1.0	1.8	1.8	2.2	2.9	3.0	2.9	2.9	1.8	1.8	1.4	1.3	1.0	1.2	2.3	...	3.4	...	...	...	...	...	3.0	2.9	2.2	1.2
20	...	1.5	1.4	1.8	2.9	2.9	2.9	2.3	2.3	1.8	1.8	1.7	...	1.2	2.3	...	...	3.4	...	...	...	...	...	...	2.2	1.0
21	...	1.2	1.7	1.8	1.8	2.0	1.9	2.0	1.9	1.8	1.8	1.3	1.3	1.2	2.2	...	...	...	...	...	...	...	3.1	...	...	...
22	1.0	1.4	1.4	1.8	1.9	2.0	1.9	1.9	1.8	1.8	1.8	1.4	...	1.3	...	2.9	3.1	...	...	...	...	3.5	...	...	2.2	1.0
23	...c	p1.3c	1.8	1.8	1.9	2.6	2.0	2.6	1.8	1.8	1.4	1.3	1.0a	...c	p2.4c	2.9	3.2	...	...	...	...	...	...	...	2.6	...a
24	...	1.3	1.8	p1.9c	2.0	2.9	2.6	2.6	1.8	1.8	1.4	1.2	...	1.3	2.4	2.9	...	...	...	...	...	...	...	2.6	2.2	1.0
25	...	1.2	1.4	1.8	1.8	2.0	1.8	1.8	1.8	1.8	1.4	1.3	...	1.3	2.3	2.9	3.2	...	...	...	...	...	3.2	...	2.0	1.1
26	1.0	1.3	1.8	...c	...c	...c	...c	...c	...c	...c	p1.4c	1.4	1.1	...	...	...	...c	...c	...c	...c	...c	...c	...c	p2.5c	2.2	1.2
27	1.1	1.3	1.8	2.0	p2.2c	2.4	2.3	2.0	1.9	1.8	1.8	1.8	1.3	1.4	2.4	3.0	3.2	...	...	...	...	3.4	...	...	...	...
28	1.0	1.4	1.8	2.0	2.0	3.0	2.4	3.0	2.0	1.8	1.8	1.4	...	1.4	2.2	...	...	...	...	3.6	...	...	...	...	2.2	...
29	1.0	1.0	1.4	1.8	3.0	2.9	2.9	2.9	1.9	1.8	1.8	1.8	...	1.4	...	2.9	...	...	...	...	...	...	3.1	...	...	...
30	...c	...c	...c	1.9	3.0	2.5	3.0	2.9	2.6	1.8	1.8	1.6	...	...c	...c	...c	...	...	...	...	...	...	...	...	...	...
31	1.1	1.8	1.8	2.9	3.1	3.0	3.0	2.3	1.9	1.9	1.8	1.4	...	1.4	2.4	2.9	3.1	...	...	...	...	...	...	...	2.0	...
* MEAN	1.0	1.3	1.5	1.8	2.2	2.4	2.4	2.4	2.1	1.8	1.6	1.4	1.0	1.2	2.2	2.8	3.1	3.4	...	3.6	3.4	3.3	3.0	2.7	2.2	1.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f°F2 EQUAL TO OR LESS THAN f°F1   h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 323

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1944 SEPTEMBER 1944

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p5.6f	3.7	3.4	3.1	2.4	2.2f	3.2	5.6	6.4	6.7	6.7	6.6	6.4	6.7	6.9	7.3	7.8	7.6	7.6	6.8	5.5	...f	...f	p6.8f	...
2	p4.8f	5.9	5.4	4.5	4.5	4.5f	3.2	5.9	7.5	7.7	7.6	6.9	6.5	6.1	6.4	6.7	7.3	7.6	8.0	6.7	5.9	p5.5f	...f	...f	...
3	p5.8f	5.5	6.6	5.4	p4.0f	p3.4f	p3.9f	6.5	7.4	8.2	8.0	8.0	7.4	7.3	7.8	8.0	7.9	7.9	8.1	7.9	7.2	7.2	7.4	7.9	6.9
4	6.0	4.8	4.1	3.2	2.6	2.0	3.7	6.0	6.9	6.8	6.1	6.0	6.3	6.6	7.3	7.4	7.9	7.6	7.5	6.7	6.4	6.8f	...f	...f	...
5	5.7f	5.0	4.6	4.4	3.6	3.1	3.6	6.4	7.2	7.6	6.8	6.7	6.2	6.1	6.1	6.5	7.0	7.2	7.8	6.5	...a	...a	p6.5f	p5.5f	...
6	5.6f	4.1f	3.9	3.1	p2.3c	p2.2c	3.8	6.4	6.7	7.2	6.7	6.8	6.4	6.8	7.2	7.6	8.3	7.9	8.0	7.6	7.4	8.5f	8.0	7.3	6.2
7	4.8	4.8	p4.4f	p3.8f	...f	...f	4.3	6.6	7.8	p7.4h	6.3	6.0	5.5	5.6	5.6	6.0	6.3	6.6	6.7	5.7	...a	...a	p6.6	6.5	...
8	6.7	5.8	4.8f	4.1	3.6	2.6	4.1	6.3	7.6	7.5	7.1	6.8	6.6	6.2	5.8	5.9	6.2	6.8	7.0a	6.3	5.6	6.1	5.5	5.8	5.9
9	5.7	5.7	5.6	4.8	3.8	3.2f	3.8	5.8	6.8	7.6	7.9	7.5	6.9	6.9	6.8	6.8	6.8	6.9	7.3	7.0	6.6	6.4f	p7.3f	6.4	6.3
10	7.0	6.4	6.1	5.0	3.8	3.6	4.8	6.7	7.0	7.8	8.0	7.7	7.5	7.5	7.5	7.1	7.0	7.1	7.4	7.2	6.5	6.1f	6.6	6.8	6.6
11	p6.8f	6.7	p6.7f	p5.0f	...f	p2.5f	3.8	6.2	7.6	7.6	7.6	7.7	7.2	7.4	7.6	7.8	7.2	7.0	7.3	6.7	5.7	6.0	6.7	7.0	...
12	6.1	6.5	5.9	4.8	4.3	3.9	4.1	6.9	7.6	7.9	8.1	8.3	7.9	8.0	7.8	7.6	8.0	7.9	7.8	6.8	5.8	6.0	6.3	p6.3f	6.7
13	...f	p6.6f	5.7f	4.7	3.6	3.2	4.3	6.2	6.9	6.7	6.5	6.5	6.7	6.8	7.8	7.9	8.1	8.2	7.8	7.0	6.9	7.9	7.8	7.3	...
14	6.2	5.8	5.5	5.0	4.2	3.6	3.9	6.1	6.7	6.2	6.3	6.5	6.3	6.4	7.4	7.6	7.6	7.2	7.0	6.6	6.1j	6.2j	7.6	7.5	6.2
15	7.0	7.0	p6.8f	p5.5f	4.3	4.1	4.6h	5.9	6.5	6.1	5.8	5.6	5.9	6.4	7.1	7.3	7.3	7.5	7.2	6.5	...a	7.3f	7.3f	6.0j	...
16	4.5f	4.5f	p3.8c	p3.7c	p3.0c	p3.0c	3.9c	p5.3c	p5.9c	5.9	5.9	6.1	6.2	6.5	6.8	6.9	7.3	7.2	6.6	5.6	...f	p5.5f	p5.6f	5.9j	...
17	5.1	p4.8f	5.1	4.0	2.7	2.0	4.3	6.2	7.0	7.3	6.4	6.4	6.3	6.7	7.3	7.7	7.9	7.6	7.5	6.9	6.1j	7.2	8.2	p7.5f	6.2
18	7.1	6.2j	4.7	3.2	2.4	2.1	4.0	6.3	6.8	6.7	6.3	6.4	6.7	7.0	7.8	8.2	8.2	8.1	8.0	7.7	7.8	7.3	6.1j	5.7	6.3
19	5.4	5.0	4.8	3.9	3.3	2.7	4.5	6.4	p6.3c	6.2	...c	...c	...c	...c	...c	...c	.c	7.0	6.9	...a	...a	...a	...a	...f	...
20	p6.1f	5.4f	p4.5c	...c	...c	...c	...c	...c	...c	6.6	6.4	6.8	7.1	7.2	7.1	7.3	8.0	7.9	7.4	6.0j	6.0j	8.5	7.6	7.3	...
21	6.0	p6.0f	p4.5c	2.9	p2.9c	p2.8c	p4.4c	6.0	7.0	6.5	6.6	6.8	6.8	6.9	7.4	8.1	8.4	8.6	8.4	7.7	7.5	...a	...f	...f	...
22	...c	...c	...c	...c	...c	3.2	p4.4c	p6.3c	7.6	8.1	8.4	7.4	7.0	7.5	8.0	p8.6c	9.3	p8.8c	p8.4c	8.0	8.3	...f	p8.6c	6.9	...
23	5.4	4.2	3.5	2.8	2.2	1.9	4.5	6.6	8.0	8.3	8.0h	7.2	7.2	7.7	7.8	7.9	8.0	7.8	7.5	7.1	6.6	...f	...f	...f	...
24	6.4f	p5.2f	3.8	p3.0f	p2.5f	2.1f	4.6	p7.0c	8.4c	7.8h	6.6	6.7	7.0	7.0	7.1	7.7	8.0	8.3	8.5	7.6	7.4	7.9	7.9	7.2	6.5
25	6.0	5.3	4.2	3.9	3.4	p3.0	5.0	6.8	8.1	8.4c	7.8	7.3	7.0	6.9	7.1	7.5	7.8	8.1	8.4	7.7	7.4	p7.6f	p7.2f	po.9c	6.6
26	p6.5c	p6.1c	p4.4c	4.2	p3.1c	3.0	p4.5c	p6.7c	p8.1c	7.7	6.8	6.8	7.1	7.2	7.4	7.2	7.2	7.5	7.9	7.6	7.0	7.0	6.7	6.2j	6.4
27	6.1j	6.1	5.0	4.3	3.2	2.7	4.9	6.6	7.7	8.8c	p8.6c	8.5c	8.3	7.7	7.8	8.1	8.4	8.5	8.5	8.0	...a	7.9a	8.5	7.9	...
28	6.8	6.4	4.9	4.1	3.7	3.3	4.9	7.0	8.1	8.1	7.5	7.4	8.0	8.3	9.3c	p9.5c	p9.5c	p9.1c	p8.7c	8.3h	p8.4f	...f	...f	p7.9f	...
29	p7.7f	7.8	p6.7f	5.7f	4.4	3.0	5.4	7.5	8.1	8.2h	7.0	6.6	6.6	6.8	7.0	7.5	7.2	7.6	7.2	p6.5a	...a	...a	...a	...f	...
30	...f	...f	p7.0f	p5.2f	p4.5f	p3.9f	5.6	7.0	7.8	p7.6h	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.6	7.7	7.6	7.3	7.1	...
31																									
*MEAN	6.0	5.6	5.0	4.2	3.4	3.0	4.3	6.4	7.3	7.4	7.1	6.9	6.8	6.9	7.2	7.5	7.7	7.7	7.7	6.8	6.8	7.0	7.2	6.8	6.4

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 324

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1944

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	230	220	230	260	290	260	240	320	350	350	360	380	390	370	340	320	240	270	310	330	340	290	230	298
2	230	230	230	240	270	290	260	220	320	360	360	370	400	400	380	350	200	230	260	330	360	300	270	250	296
3	220	230	210	220	260	310	240	230	300	300	330	370	380	360	350	330	200	250	260	280	260	240	210	210	273
4	210	210	220	230	240	250	250	230	330	340	380	400	400	400	380	340	320	250	260	290	300	250	240	210	289
5	230	240	230	240	250	270	250	230	300	360	370	380	420	380	400	360	220	230	270	340	290	230	230	220	289
6	220	220	230	240	270	280	250	230	320	340	370	360	440	420	350	320	200	240	260	280	270	240	220	230	283
7	240	270	260	260	250	270	250	220	300	q370h	390	420	430	440	430	400	330	240	280	330	260a	260	220	230	306
8	220	210	220	220	240	230	240	220	290	350	360	380	410	400	400	370	200	220	250	270	300	260	240	250	281
9	260	250	230	230	260	310	240	220	300	340	330	350	370	380	360	320	200	230	260	280	280	300	q250f	240	283
10	240	230	220	240	240	250	240	230	300	320	340	360	380	390	350	350	320	230	250	300	290	280	250	230	285
11	q260f	260	240	250	270	270	250	220	330	340	350	380	370	390	370	350	210	260	280	310	300	260	250	230	291
12	250	250	240	240	250	280	240	230	300	330	340	350	320	370	370	330	200	230	260	300	300	270	250	250	281
13	260	230	230	230	230	250	250	230	210	390	370	400	400	350	340	290	330	230	260	260	240	235	230	220	278
14	220	240	230	230	240	260	250	230	350	380	390	360	390	220	340	340	200	250	260	300	250	230	220	240	276
15	260	250	230	240	250	260	250	220	350	400	400	430	410	400	370	330	210	240	270	330	320a	220	210	210	294
16	220	220	250	260	270	270	240	230	350	410	420	410	410	410	350	360	220	240	280	350	340	230	220	220	299
17	220	240	230	220	230	250	240	220	310	360	380	400	380	380	360	340	200	240	260	300	300	260	230	240	283
18	220	230	230	230	250	290	250	230	320	360	380	400	380	380	350	320	210	230	250	250	240	220	210	220	277
19	220	220	220	230	240	240	240	230	p310c	380	...c	...c	...c	...c	...c	...c	...c	250	270	340	290	280	220	220	...
20	210	220	p220c	...c	...c	...c	...c	...c	...c	340	390	390	380	360	370	340	310	240	280	300	260	240	280	250	...
21	220	210	240	260	250	260	250	240	320	p340c	p370c	q390c	380	370	360	310	210	240	260	310	300	220	240	250	283
22	250	q250c	240	240	240	250	260	220	300	330	360	400	400	360	350	330	230	235	260	310	310	250	240	220	285
23	220	215	240	240	270	330	250	230	330	340	370	380	370	360	340	340	200	250	290	330	320	340	220	230	292
24	220	220	230	260	260	300	250	230	310	330	400	380	360	330	350	320	200	250	260	300	300a	240	230	240	282
25	240	230	240	250	260	270	240	230	300	330	360	370	380	380	370	340	200	230	260	280	300	290a	220	210	284
26	260	260	250	250	270	285	250	240	320	340	370	390	370	340	360	200	200	240	260	260	280	240	220	210	278
27	220	230	235	220	250	300	240	230	390	320	340	350	350	340	320	310	200	240	270	330	270a	260a	240	250	279
28	260	260	270	260	260	270	240	230	300	320	350	360	340	340	320	290	210	250	260	290	290	260	210	230	279
29	230	240	240	220	230	250	240	220	310	340	370	370	380	370	310	330	220	240	270	360	330	300	240	250	286
30	260	250	230	230	250	260	240	220	320	p330c	...c	...c	...c	...c	...c	...c	...c	...c	...c	330	280	240	230	230	...
31																									
MEAN*	234	235	234	238	251	272	247	228	314	348	368	381	385	371	360	334	231	239	265	305	292	260	234	230	286

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 325

SEPTEMBER 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1944

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION													MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.4	4.4	4.5	4.5	4.5	4.5	4.4	4.3	4.0	...	...	...	...	220	220	200	200	200	190	200	200	210	...	...
2	...	...	4.3	4.5	4.5	4.5	4.5	4.5	4.4	4.3	...	...	...	...	...	210	200	200	190	200	200	200	200	...	...	...
3	...	...	4.3	4.3	4.5	4.5	4.5	4.4	4.3	4.2	...	...	...	...	...	220	210	200	200	200	200	200	200	...	...	...
4	...	...	4.3	4.3	4.5	4.4	4.4	4.4	4.3	4.3	4.2	...	...	...	...	220	200	200	200	200	200	200	200	200	...	...
5	...	...	4.2	4.4	4.4	4.4	4.5	4.4	4.5	4.2	...	...	...	...	...	200	200	200	200	200	200	200	190	...	...	...
6	...	...	4.3	4.4	4.3	4.4	4.6	4.5	4.4	4.2	...	...	...	...	...	230	210	200	200	200	200	200	200	...	...	...
7	...	...	4.2	p4.5h	4.4	4.4	4.4	4.4	4.5h	4.4	4.0	...	...	...	...	220	q210c	210	200	200	190	200	200	210	...	...
8	...	...	4.1	4.4	4.4	4.4	4.4	4.4	4.4	4.2	...	...	...	...	...	220	200	200	200	200	200	190	200	...	...	...
9	...	...	4.1	4.3	4.3	4.4	4.4	4.4	4.2	4.2	...	...	...	...	...	200	200	200	200	200	200	200	200	...	...	...
10	...	...	4.3	4.4	4.4	4.5	4.5	4.4	4.3	4.2	4.0	...	...	...	...	210	200	200	200	200	200	200	200	200	...	...
11	...	...	4.1	4.5	4.5	4.4	4.5	4.4	4.3	4.2	...	...	...	...	...	220	210	210	210	200	210	210	210	...	...	...
12	...	...	4.2	4.4	4.5	4.5	4.5	4.5	4.4	4.3	...	...	...	...	...	220	210	210	200	200	200	210	200	...	...	...
13	...	...	...	4.5	4.4	4.6	4.5	4.4	4.4	4.0	4.2	...	...	...	...	...	210	200	200	200	200	200	200	220	...	...
14	...	...	4.3	4.6	4.5	4.5	4.5	4.5	4.4	4.4	...	...	...	...	...	210	210	210	200	200	190	200	200	...	...	...
15	...	...	4.2	4.3	4.5	4.5	4.5	4.4	4.5	4.2	...	...	...	...	...	220	200	200	200	210	200	210	200	...	...	...
16	...	...	4.2	4.4	4.4	4.5	4.4	4.4	4.4	4.3	...	...	...	...	...	220	210	210	200	200	200	200	190	...	...	...
17	...	...	4.2	4.4	4.4	4.5	4.5	4.4	4.4	4.2	...	...	...	...	...	200	200	210	200	200	200	190	190	...	...	...
18	...	...	4.2	4.4	4.4	4.4	4.4	4.4	4.4	4.2	...	...	...	...	...	210	210	200	210	200	210	200	200	...	...	...
19	...	...	...c	4.5	...c	...c	...c	...c	...c	...c	...	...	...	...	...	...c	200	...c	...c	...c	...c	...c	...c	...	...	...
20	...	...	...c	4.3	4.4	4.4	4.4	4.5	4.5	4.2	4.0	...	...	...	...	...c	200	210	200	190	200	200	200	210	...	...
21	...	...	...c	...c	...c	q4.5c	4.4	4.5	4.4	4.2	...	...	...	...	...	...c	...c	...c	q200c	210	190	200	220	...	...	...
22	...	...	4.2	4.4	4.4	4.5	4.6	4.4	4.4	4.2	...	...	...	...	...	220	210	210	210	200	200	200	220	...	...	...
23	...	...	4.2	4.4	4.5	4.6	4.5	4.5	4.5	4.3	...	...	...	...	...	220	220	200	200	200	210	200	190	...	...	...
24	...	...	4.1	4.4	4.5	4.5	4.5	4.4	4.5	4.2	...	...	...	...	...	215	220	210	200	200	210	200	200	...	...	...
25	...	...	4.2	4.3	4.6	4.6	4.5	4.5	4.4	4.4	...	...	...	...	...	220	210	210	210	210	200	200	200	...	...	...
26	...	...	4.2	4.5	4.5	4.5	4.5	4.5	4.5	...	...	...	...	...	...	190	220	210	200	200	210	200	...	...	...	...
27	...	...	4.3	4.5	4.5	4.5	4.6	4.5	4.4	4.3	...	...	...	...	...	220	200	220	210	210	200	200	190	...	...	...
28	...	...	4.2	4.4	4.5	4.5	4.5	4.5	4.5	4.2	...	...	...	...	...	220	210	210	220	200	200	190	190	...	...	...
29	...	...	4.4	4.5	4.6	4.6	q4.7c	4.6	4.4	4.4	...	...	...	...	...	220	220	220	200	p200c	p200c	200	200	...	...	...
30	...	...	4.5	p4.5c	...c	...c	...c	...c	...c	...c	...	...	...	...	...	210	p220c	...c	...c	...c	...c	...c	...c	...	...	...
31																										
* MEAN	...	...	4.2	4.4	4.5	4.5	4.5	4.4	4.4	4.2	4.1	...	...	...	...	215	208	206	202	201	200	200	200	208	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 326

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.4	1.8	2.9	3.0	2.4	2.3	2.9	2.4	1.8	1.8	1.4	...
2	1.0	1.4	1.8	1.8	2.0	2.0	2.0	2.0	2.0	1.8	1.8	1.3	...
3	...	1.4	1.8	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.8	...
4	1.0	1.4	1.9	2.0	p2.0c	2.0	2.0	2.0	2.0	1.9	1.9	1.0	1.0
5	1.0	1.3	1.8	1.9	2.0	2.0	1.9	2.0	2.0	1.8	1.8	1.8	...
6	1.0	1.8	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	...	...
7	...	2.0	1.9	q2.0h	2.0	2.3	2.0	2.0	2.0	2.1	1.8	1.8	...
8	...	2.0	1.9	2.0	1.8	2.0	2.0	1.8	1.8	1.8	1.3	1.0	1.0a
9	1.0	1.2	1.8	1.8	1.9	2.0	1.9	1.9	1.8	1.8	1.2	1.1	...
10	0.9	1.2	1.2	1.9	2.0	2.2	2.0	2.0	2.0	1.9	1.8	1.1	1.1a
11	1.0	1.2	1.8	1.8	1.9	1.9	2.1	2.0	1.9	1.8	1.3	1.0	...
12	1.0	1.0	1.8	2.0	2.8	2.7	2.0	2.2	2.2	1.8	1.8	1.2	...
13	0.9	1.2	1.3	1.8	2.0	1.9	2.2	1.9	2.2	1.8	1.8	1.1	...
14	1.2	1.2	1.3	1.8	1.9	2.0	2.0	2.0	2.0	1.8	1.8	1.3	...
15	0.9	1.2	1.2	1.8	1.8	2.0	2.0	2.0	2.0	1.8	1.7	1.2	1.0a
16	1.0	p1.2c	1.8	1.9	2.0	2.0	2.0	2.1	2.1	1.9	1.8	1.2	...
17	1.2	1.3	1.8	1.9	2.0	2.0	2.1	2.0	2.0	1.8	1.8	1.1	...
18	1.0	1.2	1.8	1.9	2.0	1.9	1.9	2.0	2.0	1.9	1.8	1.0	...
19	1.2	1.7	p1.8c	2.0	...c	...c	...c	...c	...c	...c	...c	1.1	...
20	...c	...c	...c	1.8	2.0	2.0	1.9	2.0	1.9	1.8	1.7	1.2	...
21	1.5	1.3	1.8	p1.8c	p2.0c	2.0	2.4	2.0	1.9	1.9	1.8	1.2	1.0a
22	...c	...c	1.7	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.7	1.7	...
23	0.9	1.2	1.7	1.8	1.9	1.9	1.9	2.0	2.0	2.0	1.7	1.2	1.0
24	q1.2c	p1.2c	1.7	1.7	1.8	2.0	2.8	2.0	2.0	1.8	1.8	1.0	...
25	1.0	1.2	1.2	1.8	2.0	2.0	2.0	2.0	1.9	1.8	1.7	...	...
26	q1.2c	p1.4c	1.8	1.9	2.0	2.1	2.0	2.0	1.8	1.8	1.3	1.0	...
27	1.0	1.0	1.2	1.8	2.0	2.0	2.0	1.9	2.0	1.8	1.9	1.2	...
28	0.9	1.2	1.8	1.9	2.0	2.0	2.3	2.0	2.0	1.8	1.8	1.2	...
29	...	1.8	1.8	1.8	2.0	2.0	2.1	2.1	1.8	1.8	1.7	1.2	...
30	0.7a	1.0	1.9	p1.9c	...c	...c	...c	...c	...c	...c	...c	...c	...
31													
MEAN*	1.0	1.3	1.7	1.9	2.0	2.0	2.1	2.0	2.0	1.9	1.7	1.2	1.0

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.4	...	...	...	...	...	...	3.6	...	...	...	2.2	1.1
2	1.4	2.3	...	...	...	...	...	...	...	3.0	3.0	...	1.0
3	...	2.3	...	...	...	...	...	...	...	...	...	2.3	...
4	2.4	3.0	...	...	...	...	...	...	...	...	...	2.3	...
5	1.4	2.4	...	3.2	...	...	...	...	...	3.0	...	2.2	...
6	p1.8	...	...	...	...	...	...	...	...	...	...	2.4	...
7	...	...	...	q3.4h	...	...	...	...	...	...	...	2.2	...
8	...	2.5	2.9	...	...	...	...	...	...	...	2.6	2.2	...
9	2.5	2.4	2.8	3.2	...	...	...	...	...	...	2.6	2.1	...
10	1.5	2.4	3.0	...	...	...	...	...	...	...	2.6	2.2	...
11	1.5	2.4	...	3.2	...	...	...	...	...	3.0	2.8	2.2	...
12	1.8	2.5	3.0	...	...	...	...	...	...	3.1	2.6	2.2	...
13	1.6	2.4	2.9	...	...	...	...	...	...	...	...	2.4	...
14	...	2.4	2.9	...	...	...	...	...	...	...	...	2.2	1.0
15	...	2.4	2.9	...	...	...	...	...	...	3.1	2.7	2.2	...
16	1.7	p2.4c	3.0	...	...	...	...	...	...	3.0	...	2.3	1.0
17	1.6	2.4	3.0	...	...	...	...	...	...	3.1	...	2.3	1.1
18	...	2.4	2.9	...	...	...	...	...	...	...	2.6	2.2	1.0
19	1.7	2.5	...c	...	...c	...c	...c	...c	...c	...c	...c	2.0	1.0
20	...c	...c	...c	...	...	...	...	...	...	...	2.8	2.1	1.0
21	1.7	2.6	...	...c	...c	...	...	...	...	...	...	2.4	...
22	...c	...c	2.8	3.4	...	...	...	...	...	3.2	...	2.2	...
23	1.8	2.4	2.8	...	...	...	...	...	...	3.0	2.6	2.2	...
24	q1.7c	...c	2.8	...	...	...	...	...	...	2.9	2.6	2.2	1.1
25	1.8	2.6	3.0	3.2	...	...	...	...	...	3.0	2.6	2.2	...
26	1.8	...c	2.9	...	...	...	...	...	...	3.0	2.6	2.1	1.0
27	1.7	2.6	3.0	3.3	...	...	...	...	...	3.0	...	2.2	1.2
28	1.8	2.6	3.0	3.3	...	...	...	...	...	3.0	2.7	2.2	1.0
29	1.8	2.6	3.0	3.4	...	...	...	...	...	3.0	2.9	2.2	...
30	...a	2.6	3.0	p3.4c	...c	...c	...c	...c	...c	...c	...c	...c	...c
31													
MEAN*	1.7	2.5	2.9	3.3	...	...	...	3.6	...	3.0	2.7	2.2	1.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 327

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1944 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND OCTOBER 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	6.7	6.7	6.3	6.0	4.8	4.2	5.8	7.7	8.2	7.9h	6.9	7.1	6.9	7.5	8.4	8.5	p8.7c	p8.6c	p8.5c	8.5c	8.5	p9.2c	p9.5c	8.4	7.5
2	7.1	6.8	6.5	5.3	3.8	3.0	5.4	7.5	8.4	p8.5c	7.2	7.0	7.3	7.5	8.4	p8.8c	9.5	p9.4c	p8.8c	7.8	...a	p8.4f	p8.4f	p8.7f	...
3	8.1	6.8	5.0	4.0	3.2	2.9	p5.7c	7.8	9.0	p9.0c	8.3h	8.0	7.5	8.1	p8.5c	p9.5c	9.5	10.2	10.1	p9.9c	p9.8c	[illegible].8c	8.4	7.1	7.8
4	5.7	4.2	3.1	2.4	1.9	1.7	5.3	7.2	8.7c	p9.0c	7.4	6.8	6.3	7.0	7.4	7.3	8.2	p8.6c	p8.6c	8.5c	p7.9f	p7.6c	7.2f	...f	...
5	p6.9f	5.6f	4.3	3.4	2.7	2.0	5.0	7.0	8.4	p8.0c	p7.5c	7.[illegible]	6.7	6.[illegible]	7.1	7.8	8.4	p9.2c	p9.2c	8.5c	p7.8f	...f	...f	...f	...
6	6.9f	5.5f	4.1f	3.5f	p3.4f	2.7	5.5	7.4	8.9	9.4	8.1h	6.8	6.7	6.8	6.7	7.2	7.6	8.4	8.5	8.0f	p8.1f	9.4	8.5	7.2	6.9
7	6.1	5.5	4.1	3.4	3.1	3.1	5.8	6.9	7.4	8.2	8.9	8.2h	7.1	7.0	7.2	7.4	7.8	8.5	9.0	p8.2c	...f	p7.8c	7.1	6.1	...
8	5.4	4.6	3.6	2.9	2.4	2.3	5.3	6.7	7.4	8.3	9.3	9.3h	8.0h	7.3	7.6	8.0	8.1	8.4	8.8	8.1	7.6	7.4	7.0	6.9	6.7
9	6.5	5.2	4.4	3.6	3.2	3.0	5.5	6.9	7.8	8.7	8.9	8.7h	7.7	7.3	7.3	7.4	7.3	7.4	7.3	6.9	6.8	6.7f	6.9f	...f	...
10	6.2f	...f	p5.2f	p4.8f	p4.0f	p3.2f	5.6	6.8	7.6	8.5	9.2	9.4	8.8h	7.9	7.6	7.4	7.4	7.8	8.2	7.8	p7.7f	...f	...f	7.3f	...
11	p7.2f	...f	...f	...f	...f	...f	5.1	7.3	8.7	9.2	9.9	10.3	10.7	11.3	11.9	10.5h	9.2h	6.8	7.3	7.8	7.5	7.8	8.4	8.4	...
12	8.3	7.4	6.4	5.4	5.2	4.4	6.3	7.8	8.4	8.5	8.3	8.4	8.7	8.6	8.6	8.4	7.8	7.0	7.5	7.2	7.7	8.0	7.9	8.1	7.5
13	7.3	6.8	5.6	4.0	3.3	3.0	5.9	7.4	8.8	9.5	9.2	8.2	8.2	8.6	8.8	9.1	8.9	8.8	8.5	8.7	7.9	7.4	8.0	7.9	7.5
14	8.6	6.7	3.7	2.2b	1.5b	2.0	5.5	7.7	8.7	9.6	10.1	9.9h	9.7h	10.4h	10.8	11.2	11.2	11.2	10.0	9.3h	p7.2f	p7.0f	...f	...f	...
15	...f	p4.5f	p5.2f	4.4	p4.6f	...f	5.5	7.8	9.0	8.3	7.8	7.3	7.9	8.3	8.6	9.1	9.7	10.3	9.7	8.5	8.7	8.9	8.2	p7.4f	...
16	7.6f	6.1	4.7	3.2	3.0	2.8	5.8	8.1	9.2	9.3	8.0	7.9	8.2	8.7	9.6	10.8	11.3	11.2	10.7c	10.1c	...f	...f	...f	...f	...
17	...f	p5.5f	...f	4.8f	3.8	2.8	5.6	7.8	8.3	7.5	7.2	7.1	7.2	7.3	8.2	8.4	p8.8c	p9.0c	p9.1c	9.2	8.9	8.1	6.5	5.0	...
18	4.6a	4.5f	3.8f	3.5	3.2	3.0	5.4	7.4	8.3	7.4	6.8	6.8	7.0	7.5	8.0	8.9	9.4	10.0c	p10.2c	p9.7c	p8.5c	...c	...c	...c	...
19	...c	...c	...c	...c	...c	...c	...c	...c	p8.3h	6.8	p6.5c	6.2	...c	...c	...c	8.3	9.0	9.6	10.0	9.0	p8.4f	6.6f	5.6f	5.2f	...
20	5.3f	4.8	3.9	2.4	p1.8b	...b	5.5	7.8	8.6	6.9	6.4	6.3	p9.4c	6.8	7.0	7.8	8.4	8.8	8.9	8.0	7.2	7.2f	7.3f	...f	...
21	p6.5f	5.1	3.6	2.9	2.1	2.3	5.7	p7.3c	p8.7c	9.0	8.0	7.2	7.4	7.3	7.9	8.5	9.3	9.1	9.6	9.2	9.0	...f	8.0	7.5	...
22	6.2	5.2	3.2	1.9b	...b	2.1b	5.7	7.6	8.5	8.9	8.4h	8.2	7.9	7.9	8.4	8.7	9.0	9.2	p8.2j	p8.5c	8.4	...f	...f	...f	...
23	p7.2f	6.0f	p4.9f	4.1	3.3	2.3	5.3	p8.0c	8.7	9.7	9.3	8.0	7.7	p8.0c	p8.4c	8.9	9.6	p9.2c	8.9	8.3f	...f	...f	...f	...f	...
24	...f	p7.2f	p5.4f	3.6f	3.2f	2.5f	5.9f	7.5	p8.9c	10.0	p10.5c	9.9	9.2	8.4	8.2	8.5	9.3	9.6	10.3	10.0	9.2	8.4	8.2	p8.4c	...
25	p8.4c	p8.4c	p8.4c	p4.7c	p3.8c	2.8	p5.8c	p7.8c	p7.8c	7.9h	7.4	7.3	7.0	7.3	7.7	8.1	8.4	9.1	9.1	8.5	7.6	7.6	p8.0f	p7.0f	7.3
26	p6.7f	5.0f	2.7	2.5	...f	2.0f	5.6	7.5	8.7	9.3	8.0	7.4	7.2	7.2	7.7	8.0	8.3	8.5	8.8	8.5	7.9	7.3	6.7f	...f	...
27	p6.6f	p6.4f	p5.5f	4.3	3.8	3.7	6.5	8.2	9.2	10.1	10.4	9.8	8.8	8.6j	8.7	8.7	8.5	8.4	8.4	8.5	7.2	...f	...f	...f	...
28	...f	...f	...f	...f	...c	...c	p6.4c	8.5	9.0	9.3	9.5	8.9	8.8	9.2	9.4	9.2	8.7	8.4	8.3	8.2	7.6	...f	p7.3f	...f	...
29	...f	p5.6f	p5.5f	4.3	2.9	2.7	5.9	7.9	9.1	10.0	10.4	10.9	11.0	11.3	11.5	10.3	11.0	9.0	7.2	6.9	...f	p5.9f	8.4f	p8.3f	...
30	7.8f	5.0	2.7	2.0	1.6	2.4	5.9j	7.8	8.6	8.1	8.0	8.0	8.6	9.0	9.4	9.9	10.4	10.5	10.1	9.4	...f	...f	...f	...f	...
31	...f	...f	p4.4f	p3.9f	2.6	2.8	6.4	8.5	8.9	7.6	8.0	8.1	8.0	8.6	9.2	9.8	10.0	10.1	10.0	9.2	9.2	8.5	8.0	7.2	...
MEAN*	6.8	5.8	4.7	3.7	3.2	2.8	5.7	7.6	8.5	8.7	8.4	8.1	8.1	8.1	8.5	8.7	9.0	9.0	9.0	8.6	8.1	7.9	7.7	7.3	7.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 328

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1944 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — OCTOBER 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	240	230	230	230	250	240	250	240	310	360	370	380	390	370	320	270	210	250	280	300	270	230	220	210	277
2	220	230	220	230	240	230	240	230	310	300	380	380	370	330	320	300	200	250	270	340	...a	230	250	230	...
3	230	220	240	230	250	250	240	230	280	330	340	370	370	370	310	290	240	230	260	280	260	240	230	240	272
4	230	230	240	250	260	270	250	230	300	360	380	380	360	360	370	200	210	240	260	310	290	290	280	240	283
5	230	230	240	230	230	240	240	230	290	340	p370c	400	360	420	360	320	210	250	260	320	340	300	250	240	288
6	210	220	240	260	250	250	240	220	290	320	380	385	400	380	330	340	210	250	270	330f	230	220	210	230	278
7	240	230	240	240	280	290	240	230	280	320	340	370	410	370	370	320	200	240	260	p300c	300	220	230	250	282
8	250	220	230	230	260	280	240	220	280	310	350	350	360	380	360	310	200	240	250	260	260	240	260	240	274
9	260	250	240	250	270	290	240	220	280	320	350	360	380	380	360	360	300	250	250	280	290	260	230	240	288
10	250	250	240	230	220	240	240	220	280	300	320	350	360	360	340	330	220	240	250	290	270	270	300	300	278
11	260	270	300	320	300	330	240	220	300	300	310	330	290	310	320	210	200	230	250	250	250	230	220	230	270
12	250	260	270	240	240	240	240	240	220	310	330	330	330	330	300	300	210	250	250	280	230	210	220	240	263
13	240	230	230	230	230	250	230	230	280	300	340	330	320	310	300	300	240	250	240	240	250	220	210	220	259
14	220	200	230	240b	250b	270	240	230	210	290	320	330	320	320	310	300	210	240	260	320	310	300	320	300	272
15	270	250	250	270	280	260	240	230	290	320	330	350	350	320	310	290	200	250	270	300	290	260	280	280	281
16	240	220	230	250	230	250	230	230	280	300	320	310	310	320	300	270	220	250	380	280	270	280	370	330	278
17	300	280	260	240	240	270	230	230	320	330	330	360	360	350	320	290	200	230	260	290	290	310	370	350	292
18	320	270	260	250	270	270	240	230	320	330	370	360	340	330	310	300	220	240	260	320	300	...c	...c	...c	...
19	...c	...c	...c	...c	...c	...c	...c	...c	p320c	350	390	370	...c	...c	...c	310	290	230	250	300	270	310	330	310	...
20	290	250	220	240	250	...b	230	220	330	350	390	420	380	370	330	330	250	250	260	310	320	310	290	260	...
21	220	230	230	250	250	260	240	220	270	330	350	380	370	350	320	300	280	240	260	300	300	270	240	240	279
22	250	250	250	260	...b	300	230	230	290	350	340	350	360	360	340	300	200	230	250	300	260	270	250	260	...
23	270	260	250	250	240	270	260	230	300	330	350	370	360	p330c	310	300	200	240	270	320	280	290	300	280	286
24	270	250	240	240	240	240	250	240	270	320	340	340	350	340	320	310	220	250	260	290	310	260	270	280	279
25	250	240	230	230	240	250	240	240	320	350	360	350	370	370	350	320	210	250	260	330	310	300	300	300	290
26	280	220	260	330	320	310	240	230	310	340	350	370	360	360	310	190	240	240	260	310	310	270	290	270	290
27	260	240	230	240	250	250	240	220	300	330	330	360	340	330	330	320	200	240	260	300	400	360	390	360	295
28	320	300	290	290	290	240	q250c	240	320	330	340	340	340	330	320	300	200	250	270	280	300	300	310	300	294
29	290	260	240	230	240	260	240	230	300	330	320	340	320	340	340	330	200	250	280	320	280	250	230	240	278
30	230	220	230	280	280	280	250	230	340	350	370	340	340	360	330	320	210	250	260	320	320	320	330	360	297
31	330	320	250	230	240	290	250	230	330	350	350	340	340	350	320	300	200	250	260	300	280	280	300	340	293
MEAN*	257	244	244	250	255	264	241	229	294	327	349	358	354	350	328	298	219	244	264	299	279	270	276	272	282

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 329

OCTOBER 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1944

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.4	4.5	4.6	4.6	4.6	4.7	4.5	4.1	...	...	...
2	...	...	4.8	4.5	4.8	4.7	4.7	4.7	4.5	4.2	...	...	...
3	...	...	4.4	4.5	4.7	4.7	4.7	4.8	4.4	4.2	...	...	...
4	...	...	4.5	4.7	4.7	4.7	4.7	4.5	4.6	...	...	...	...
5	...	...	...a	4.8	p4.7c	4.7	4.7	4.8	4.5	4.4	...	...	...
6	...	...	4.4	4.6	4.7	4.7	4.6	4.6	4.4	4.3	...	...	...
7	...	...	4.4	4.6	4.6	4.7	4.7	4.5	4.5	4.4	...	...	...
8	...	...	4.4	4.5	4.5	4.6h	4.6	4.6	4.5	4.3	...	...	...
9	...	...	4.2	4.6	4.7	4.6	4.6	4.5	4.5	4.6	4.1	...	...
10	...	...	4.5	4.5	4.6	4.7	4.7	4.5	4.5	4.3	...	...	...
11	...	...	4.4	4.4	4.6	4.6	4.5	4.6	4.5	...	...	...	...
12	...	...	...	4.6	4.7	4.7	4.6	4.5	4.4	4.3	...	...	...
13	...	...	4.2	4.5	4.8	4.6	4.6	4.6	4.4	4.2	...	...	...
14	...	...	...	4.5	4.6	4.7	4.6	4.5	4.5	4.4	...	...	...
15	...	...	4.4	4.5	4.6	4.8	4.8	4.6	4.5	4.2	...	...	...
16	...	...	4.4	4.5	4.6	4.6	4.5	4.4	4.3	4.3	...	...	...
17	...	...	4.5	4.5	4.6	4.6	4.5	4.6	4.5	4.4	...	...	...
18	...	...	4.3	4.5	4.6	4.6	4.6	4.5	4.4	4.3	...	...	...
19	...	...	p4.4c	4.6	4.7	4.6	...c	...c	...c	4.5	4.2	...	...
20	...	...	4.5	4.6	4.6	4.6	4.6	4.5	4.8	4.5	...	...	...
21	...	...	4.4	4.7	4.7	4.8	4.6	4.6	4.5	4.4	4.3	...	...
22	...	...	4.5	4.6	4.6	4.6	4.7	4.7	4.5	4.4	...	...	...
23	...	...	4.4	4.6	4.6	4.7	4.6	p4.6c	4.5	4.4	...	...	...
24	...	...	4.5	4.5	4.6	4.6	4.5	4.5	4.4	4.5	...	...	...
25	...	...	p4.5c	4.5	4.7	4.6	4.7	4.7	4.6	4.4	...	...	...
26	...	...	4.5	4.6	4.6	4.7	4.6	4.6	4.4	...	...	...	...
27	...	...	4.6	4.6	4.6	4.7	4.7	4.6	4.5	4.4	...	...	...
28	...	...	4.5	4.6	4.8	4.7	4.8	4.6	4.5	4.3	...	...	...
29	...	...	4.5	4.7	4.7	4.9	4.6	4.7	4.6	4.3	...	...	...
30	...	...	4.6	4.7	4.7	4.8	4.7	4.7	4.6	4.5	...	...	...
31	...	...	4.5	4.7	4.7	4.7	4.7	4.8	4.6	4.4	...	...	...
MEAN*	...	...	4.4	4.6	4.6	4.7	4.6	4.6	4.5	4.4	4.2	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	220	210	200	220	210	210	220	200	...	...	...
2	...	...	220	200	210	200	210	210	200	190	...	...	...
3	...	...	220	220	220	200	200	200	200	200	...	...	...
4	...	...	220	210	210	200	210	200	200	...	...	...	...
5	...	...	...a	220	p215a	210	200	200	200	200	...	...	...
6	...	...	220	210	210	210	210	210	200	210	...	...	...
7	...	...	220	210	210	210	210	210	200	200	...	...	...
8	...	...	210	210	200	210	210	210	200	200	...	...	...
9	...	...	210	210	210	200	200	200	200	200	200	...	...
10	...	...	220	200	...a	200	200	200	200	190	...	...	...
11	...	...	220	220	210	200	210	200	200	...	...	...	...
12	...	...	...	220	210	200	200	200	200	190	...	...	...
13	...	...	200	200	200	200	200	190	180	190	...	...	...
14	...	...	...	210	200	200	200	190	210	200	...	...	...
15	...	...	220	210	210	210	200	190	190	190	...	...	...
16	...	...	220	200	200	200	190	200	200	180	...	...	...
17	...	...	200	200	200	200	200	200	200	190	...	...	...
18	...	...	220	200	200	200	200	190	190	190	...	...	...
19	...	...	p220c	200	200	190	...c	...c	...c	q200c	210	...	...
20	...	...	220	200	200	200	210	200	190	200	...	...	...
21	...	...	210	200	200	200	200	190	180	190	200	...	...
22	...	...	220	210	220	210	220	200	190	200	...	...	...
23	...	...	210	210	210	210	200	p200c	190	210	...	...	...
24	...	...	210	220	220	210	200	200	200	200	...	...	...
25	...	...	220	220	215	200	200	200	200	200	...	...	...
26	...	...	220	210	210	220	200	200	200	...	...	...	...
27	...	...	210	230	220	210	210	200	200	190	...	...	...
28	...	...	220	220	220	210	200	200	200	200	...	...	...
29	...	...	220	200	210	200	200	210	200	210	...	...	...
30	...	...	210	220	220	210	210	200	200	200	...	...	...
31	...	...	220	210	220	210	200	210	210	200	...	...	...
MEAN*	...	...	216	210	209	205	204	201	198	197	203	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f°F2 EQUAL TO OR LESS THAN f°F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 330

OCTOBER 1944 | OCTOBER 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.2	1.7	1.9	2.1	2.2	2.2	2.1	2.2	2.0	1.9	1.2	...	1.8	2.5	3.0	...	...	...	...	...	...	...	2.8	2.2	1.0
2	1.2	1.8	1.9	2.0	2.0	2.1	2.1	2.0	2.0	1.8	1.2	1.2	...	1.8	2.5	3.2	...	...	...	...	...	...	3.0	2.6	2.2	1.2
3	1.2	1.2	1.7	1.8	2.0	2.0	2.0	2.0	2.0	p2.0c	1.8	1.2	...	1.9	2.6	3.2	...	...	...	...	...	...	...	...	2.2	...
4	...	1.2	1.8	1.9	1.9	2.0	2.0	2.0	1.8	1.8	1.7	1.2	...	1.8	2.6	3.0	...	...	...	...	...	...	3.0	2.6	2.1	1.0
5	1.2	1.8	1.8	1.8	...c	2.0	2.1	2.0	1.9	1.8	1.7	1.2	...	2.0	2.8	...	...	...c	...	...	...	...	...	2.6	2.2	1.2
6	0.7	1.7	1.9	1.9	2.0	2.0	2.1	2.0	2.0	2.4	1.2	1.2	...	2.0	2.6	3.0	3.4	...	...	...	...	...	...	2.6	2.3	1.2
7	1.0	1.8	1.8	1.8	1.9	2.1	2.0	2.0	1.9	1.7	1.3	1.2	1.0a	1.9	2.7	3.0	3.4	...	...	...	...	....	3.0	2.6	2.3	...a
8	1.0	1.7	1.9	2.0	2.0	1.9	2.0	1.9	1.8	1.9	1.2	1.1	...	1.9	2.6	3.0	3.4	...	...	...	...	...	3.0	2.6	2.3	1.1
9	0.9	1.0	2.0	2.1	2.1	2.0	1.9	1.8	1.8	1.8	1.3	1.2	1.0	1.9	2.6	3.0	3.4	...	...	...	...	...	3.0	2.6	2.3	1.2
10	1.2	1.8	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.8	1.2	...	2.0	2.8	3.0	3.4	...a	...	...	...	3.4	3.0	2.8	2.4	1.2
11	1.1	1.2	1.8	2.0	2.0	2.0	2.1	2.2	2.0	1.8	1.3	1.2	...	1.9	2.5	3.0	...	...	...	...	3.6	3.4	3.0	2.6	2.2	1.1
12	1.0	1.3	1.8	1.8	2.0	2.0	1.9	1.8	1.8	1.8	1.3	1.1	...	1.9	2.8	...	...	...	...	...	...	...	3.0	2.6	2.2	1.1
13	1.1	1.2	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.2	1.2	...	2.0	2.6	3.0	...	...	...	...	...	...	3.0	3.0	2.2	1.2
14	1.2	1.2	1.8	1.8	2.0	1.8	1.8	2.0	1.8	1.8	1.2	1.2	...	2.0	2.6	...	...	...	...	...	...	...	3.1	2.6	2.0	1.0
15	0.9	1.2	1.8	1.8	1.9	1.9	2.0	2.0	1.8	1.3	1.2	1.0	...	1.9	2.6	3.0	...	3.5	...	...	...	...	3.0	2.6	2.2	1.0
16	1.0	1.2	1.8	1.8	1.9	2.0	2.0	1.9	2.1	1.8	1.2	1.0	...	2.0	2.6	3.0	...	...	...	...	...	...	3.0	3.0	2.4	...
17	0.9	1.2	1.8	1.8	2.0	2.0	2.0	1.9	1.8	2.0	1.2	1.0	1.1a	1.9	2.6	3.0	...	...	...	...	...	...	2.9	2.6	2.2	...
18	1.0	1.2	1.8	1.8	1.8	2.0	2.2	2.1	2.1	1.8	1.8	...	...	2.0	2.6	...	...	...	...	...	...	...	3.0	2.9	2.2	...c
19	...c	...c	p1.8c	1.9	2.1	2.0	...c	...c	...c	1.9	1.8	...	...	...c	...c	p3.0c	...	...	...	...c	...c	...c	3.1	2.9	2.2	...
20	1.4	1.9	2.0	2.0	2.2	2.2	2.2	2.2	2.2	1.8	1.8	1.2	...	2.1	2.6	3.0	...	...	...	...	...	...	...	...c	2.2	...
21	1.8	2.2	2.4	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	1.8	1.2a	2.0	2.8	...	...	...	...	...	...	3.4	3.1	2.8	2.4	...c
22	1.8	1.9	1.9	2.2	2.2	2.2	2.4	2.1	2.0	1.9	1.8	1.7	1.2a	2.0	2.6	3.0	...	...	...	...	...	...	3.0	2.8	2.2	...
23	1.2	q2.1c	1.9	2.2	2.0	2.2	2.3	p2.1c	p2.1c	2.0	2.0	1.3	...	2.0	2.9	3.0	...	...	...	...	...	...	...	2.9	2.2	1.2
24	1.3	1.8	2.0	2.0	2.2	2.2	2.0	2.2	1.8	1.8	1.7	1.2	...	2.0	2.8	3.0	3.4	...	...	...	...	3.5	3.0	...	2.1	1.0
25	q1.3c	p1.bc	1.9	1.8	1.8	2.2	1.9	2.0	2.0	1.8	1.3	1.7	...	q1.9c	...c	2.9	...	...	...	...	...	...	3.2	...	2.3	1.0
26	1.3	1.3	1.8	1.8	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.2	...	2.0	2.6	3.1	...	...	...	...	...	3.6	3.2	3.0	2.2	1.2
27	1.0	1.9	1.9	2.0	2.0	2.1	2.0	2.0	1.9	1.8	1.3	1.2	1.2	2.0	2.7	3.2	...	...	...	...	...	3.5	3.1	...	2.2	...
28	p1.0c	1.2	p1.8c	p2.0c	2.0	2.0	2.0	1.9	1.9	1.8	1.2	1.2	...	...c	3.2	3.3	...c	...	...	...	...	...	3.1	2.8	2.3	...
29	1.2	1.2	1.9	2.0	2.0	2.3	2.0	2.0	2.0	1.6	1.3	1.1	...	2.1	2.6	3.2	...	...	...	...	...	...	...	2.9	2.3	...
30	1.0	1.2	1.7	1.8	1.9	1.9	2.0	1.9	q2.8c	1.8	1.5	1.2	...	2.0	2.6	3.0	...	...	...	...	...	...	3.2	2.4	2.2	1.1
31	1.0	1.2	1.7	1.7	1.8	1.9	2.0	1.9	1.8	1.7	1.9	1.2	...	2.3	2.8	3.2	3.4	...	...	...	...	...	3.2	2.8	2.2	1.8
MEAN*	1.1	1.5	1.8	1.9	1.9	2.0	2.0	2.0	2.0	1.8	1.5	1.2	1.1	2.0	2.7	3.1	3.4	3.5	...	...	3.6	3.5	3.1	2.7	2.2	1.2

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 331

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1944 NOVEMBER 1944

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p6.4f	...f	4.7	3.3	1.5b	2.4	6.2	8.0	8.9	8.4	8.0	7.9	8.1	8.2	9.4	9.9	10.3	10.5	9.7	9.6	...f	p7.8f	...f	...f	...
2	...f	...f	...f	p2.9f	p2.2f	p2.3f	6.2	8.5	9.5	p9.8c	8.1	7.8	7.9	7.9	8.0	8.8	9.0	8.5	p10.2c	p9.7c	p9.2c	...f	...f	...f	...
3	...f	...f	p4.3f	3.3	2.3	2.6	6.0	7.8	8.7	p9.7c	p8.6c	7.6	8.2	8.3	8.0	8.0	8.0	8.2	8.5	8.4	8.3f	7.8f	...f	...f	...
4	...f	...f	p4.4f	3.7f	p3.2f	p3.1f	5.9	7.5	8.2	9.1	9.5	8.1h	7.3	7.0	7.1	7.3	7.4	8.1	8.7	7.8	7.8	p7.1f	6.0f	4.8f	...
5	p3.7f	...f	...f	...f	...f	p2.1f	5.8	8.3f	9.6	10.6	11.2	11.4	11.2	10.8h	9.6	10.0	10.4	10.0	9.7	p10.1c	10.5	10.1	8.3	6.6	...
6	p5.2f	...a	...a	...a	...a	...c	6.1	8.4	9.3	10.1	10.5	10.6	10.5	10.4	10.0	9.6	9.2	8.8	9.1	8.3	...f	...f	...f	...f	...
7	p4.6f	p4.5f	p4.5f	4.3f	3.7	2.8	6.2	8.0	9.0	9.3	8.2	8.0	8.3	8.4	8.5	8.9	9.3	9.1	8.5	8.5	7.9	6.3	...f	...f	...
8	...f	...f	p4.5f	p4.0f	3.4f	3.1	6.1	7.7	8.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
10	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.8	8.1	7.8	p8.1c	7.3	5.7	...
11	p5.5f	p5.5f	p5.2f	p5.0f	4.7f	p3.7c	6.2	7.7	8.4	p9.0c	p9.9c	p9.6c	p10.3c	p11.1c	p11.1c	p11.1c	p10.0c	p10.0c	p9.5c	8.5	8.4	8.3	p8.0c	6.7f	8.1
12	5.6f	5.5f	p3.8c	2.0	1.5	2.7	5.5	7.8	8.4	8.1	7.8	7.8	8.0	7.8	7.6	7.4	7.3	7.4	7.5	7.2	p6.7f	...f	p5.2f	5.2	...
13	p4.1c	p3.0f	3.1f	2.5	2.0	2.6	5.8	7.3	8.5	8.1	8.2	8.9	8.5	9.2	9.7	9.1	p8.8c	8.5	p8.4c	7.5	p7.8f	...f	...f	...f	...
14	...c	...c	...c	...c	...c	...c	...c	...c	...c	p8.7c	7.9	7.7	7.8	8.3	8.5	p8.7c	p8.7c	8.4	8.3	7.9	p6.7f	...f	...f	...f	...
15	...f	p3.2f	3.3	...f	...f	2.6	5.6	7.2	8.0	8.3	8.4	8.4	8.4	p9.3c	p8.7c	8.5	8.3	p8.2c	7.7	7.9	6.9	p6.2f	p5.5f	...c	...
16	...c	...f	...f	p2.8f	p2.8f	p2.8f	6.1	7.6	8.8	p9.6c	p9.8c	p9.9c	10.3	p10.3c	10.0c	p9.7c	p9.5c	8.8	p8.6c	8.4	8.0	8.2	8.3	7.5	...
17	p7.0c	5.3f	...c	...c	...c	...c	5.7	p7.7c	8.3	7.9c	...c	...c	...c	...c	...c	...c	...c	8.1	8.5	8.5	8.0	p7.2f	...f	...f	...
18	...f	...f	...c	...c	...c	...c	...c	...c	...c	7.7	7.0c	7.6	8.3	8.6	p8.8c	8.5	8.0	8.1	8.3	8.4	7.9	...c	...c	...c	...
19	4.0	3.0	...f	...b	...b	...b	5.7	7.2	8.7	p9.4c	8.9c	p9.2c	9.6c	9.6c	9.0c	...c	...c	...c	...c	...c	8.5	6.6c	p6.9c	p7.2a	...
20	7.5	...c	...c	...f	...f	2.8	5.8	7.7	8.4	9.2c	8.8	8.5c	8.0	p8.9c	9.9c	9.4	9.2c	p9.3c	p9.5c	9.6	9.4	9.0	6.9	6.3f	...
21	...f	p3.9f	3.8f	3.8f	p3.6f	4.0	6.0	7.5	8.4	9.1	8.8	9.8	9.7	9.7	10.6	11.7	11.0	11.1	10.4	10.4	9.7	7.7	6.5	6.2	...
22	5.6	...c	...c	...b	...b	...c	5.9	7.7	8.5	8.7	p7.9c	7.1c	7.2	7.5	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...c	...c	...c	2.9f	3.0f	2.9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
24	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.4	9.6	10.3	10.9	11.1	p10.8c	p10.4c	10.1	9.6	9.5	10.1	9.2	7.5	5.4	...f	...
25	...f	...f	...c	...c	...c	2.3c	5.4	7.2	7.7	8.0	7.6	8.1	8.4	9.2	9.2	8.9	9.1	9.2	8.7	8.2	p9.3f	...a	...f	p4.0f	...
26	3.7	...f	...f	...c	...c	...c	p5.1c	p6.6c	...c	...c	...c	...c	...c	10.3	10.6	10.5	p10.4c	10.3	9.2h	8.7h	...f	...f	...f	...f	...
27	p3.9f	...f	...f	...f	...f	...f	5.1f	6.6	7.4	7.7	8.1	8.6	9.3	9.4	9.4	9.2	9.3	p8.2c	7.4	7.8	8.9	...c	...c	...f	...
28	...f	p4.5f	p4.2f	...b	...b	...b	5.5	6.2	p7.8	9.2	9.6	9.6	8.9	8.5	8.4	8.9	8.2	8.3	8.5	7.7	...f	...f	...f	...f	...
29	p4.3f	p3.9f	...f	p2.7f	2.3	2.8	p5.4c	p6.4c	p7.4c	8.3	8.7	9.0	9.4	9.0	9.3	8.9	8.3	8.2	8.5	8.2	7.6	7.6	7.5j	5.6	...
30	p4.1f	p2.7f	...f	p2.6f	...f	p2.6f	5.6	7.5	8.4j	7.9	7.6	7.1	7.5	8.0	8.3	8.1	7.3	8.6	8.5	8.7	p8.6c	p8.1c	...f	...a	...
31																									
MEAN*	5.0	4.1	4.2	3.3	2.8	2.8	5.8	7.5	8.5	8.8	8.7	8.7	8.8	9.1	9.2	9.2	9.0	8.9	8.8	8.6	8.3	7.7	6.8	6.0	7.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 332

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1944 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — NOVEMBER 1944

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	330	280	210	230	260	280	240	230	300	320	350	330	340	320	p320c	280	200	220	260	280	330	300	320	350	287
2	370	340	300	250	240	250	230	220	290	340	350	p370c	350	340	280	300	220	240	250	p250c	280	320	320	310	292
3	330	300	230	240	250	250	230	220	220	p300c	340	360	360	360	350	320	200	250	250	270	280	330	360	400	292
4	430	350	260	240	250	260	250	230	300	320	350	370	350	370	360	330	220	250	240	270	280	300	300	360	302
5	340	340	350	340	300	320	240	240	300	300	300	340	350	350	320	300	240	260	270	260	250	280	320	340	302
6	370	...a	410	410	380	...c	...a	260a	300	300	320	320	320	330	320	320	220	250	250	280	320	260	340	340	...
7	280	240	250	230	220	240	240	220	300	330	330	340	340	320	320	200	230	250	240	260	300	330	340	320	278
8	280	300	260	220	230	240	240	230	270	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
10	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	240	250	250	p250c	240	300	...
11	280	260	240	220	230	240	240	230	280	300	330	320	320	330	300	300	200	250	250	250	240	230	240	270	265
12	250	230	230	250	280	280	240	220	300	340	330	350	350	350	340	320	230	240	240	280	300	300	330	340	288
13	320	270	250	240	260	250	240	230	330	350	360	350	350	340	320	300	200	250	250	270	270	330	370	350	294
14	...c	...c	...c	...c	...c	...c	...c	...c	...c	330	340	370	360	340	340	300	220	240	250	290	320	330f	...a	310f	...
15	310	250	230	250	260	270	250	230	330	330	350	360	340	340	340	330	310	260	250	270	280	340	350	360	300
16	400	400	360	270	230	250	240	230	300	320	340	340	340	330	350	320	200	250	250	260	250	240	280	260	292
17	250	230	240	230	220	250	280	300	320	330	...c	...c	...c	...c	...c	...c	...c	240	250	270	280	310	320	340	...
18	310	260	220	250	q270c	260	220	290	350	340	360	350	340	350	340	270	200	240	250	270	290	300	290	270	287
19	240	230	280	...b	...b	...b	230	230	300	330	340	350	350	330	330	320	220	230	260	250	240	270	320	...a	...
20	...a	...b	...b	...b	270	270	240	230	330	310	350	p360c	360	340	320	340	p230c	230	240	240	240	240	300	310	...
21	300	300	270	240	240	250	230	220	290	330	350	340	350	340	330	300	220	230	250	250	250	260	280	270	279
22	280	260	280	...b	...b	...b	260	280	330	340	...c	...c	...c	360	...c	...c	...c	230	250	250	260	300	360	370	...
23	370	340	350	300	230	250	240	270	...c	...c	...c	...c	...c	...c	...c	...c	...c	240	260	310	360	400	410	390	...
24	p390c	390	390	p370c	360	310	240	p260c	p330c	320	330	340	350	350	220	240	260	270	310	300	350	380	320	260	318
25	...c	...c	...c	...c	...c	290	250	220	330	350	350	350	370	370	300	370	200	250	260	280	350	320	350	340	...
26	340	360	320	...c	...c	...c	270	240	330	330	...c	...c	...c	330	330	q330a	p240c	270	260	270	260	270	390	400	...
27	380	370	410	360	280	270	250	240	330	340	350	330	340	340	350	360	220	250	270	290	...c	...c	...c	360	...
28	330	300	260	...b	...b	...b	...c	...c	p300c	340	350	360	370	370	360	360	350	270	260	290	320	340	410	380	...
29	320	290	280	250	270	270	240	230	p300c	310	340	360	350	360	370	350	220	200	240	300a	260a	280a	270a	310	290
30	360	380	370	330	300	300	240	220	320	300	360	360	360	360	330	340	310	270	270	280	240	300	320	...a	...
31																									
MEAN*	326	303	290	272	265	266	243	239	307	325	342	349	348	345	327	312	232	246	254	271	283	300	325	331	296

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 333

NOVEMBER 1944 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — NOVEMBER 1944

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.5	4.5	4.7	4.7	4.7	4.6	p4.7c	4.2	...	...	...
2	...	...	4.3	4.7	4.8	p4.8c	4.7	4.7	4.3	4.3	...	...	...
3	...	...	...	p4.5c	p4.7c	4.9	4.8	4.7	4.6	4.3	...	...	...
4	...	...	4.5	4.6	4.7	4.6	4.6	4.6	4.6	4.4	...	...	...
5	...	...	4.4	4.5	4.6	4.7	4.7	p4.7c	4.5	4.3	...	...	...
6	...	...	4.5	4.5	4.6	4.6	4.6	4.5	4.4	4.4	...	...	...
7	...	...	4.5	4.8	4.6	4.6	4.6	4.5	4.3	...	...	...	...
8	...	...	4.3	...c	...c	...c	...c	...c	...c	...c	...	...	...
9	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
10	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
11	...	...	4.4	4.7	4.6	4.6	4.6	p4.6c	4.6	4.3	...	...	...
12	...	...	4.4	4.6	4.4	4.7	4.6	4.5	4.7	4.4	...	...	...
13	...	...	4.3	4.5	4.5	4.5	4.5	4.5	4.3	4.1	...	...	...
14	...	...	...c	4.4	4.5	4.5	4.6	4.5	4.4	4.2	...	...	...
15	...	...	...c	...c	...c	4.6	...c	...c	...c	...c	...	...	...
16	...	...	...c	4.6	4.6	4.5	p4.5c	4.5	4.5	...c	...	...	...
17	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
18	...	...	...c	4.5	...c	...c	...c	...c	...c	4.2	...	...	...
19	...	...	4.5	4.5	...c	...c	...c	...c	p4.6c	p4.7c	...	...	...
20	...	...	4.6	4.5	...c	...c	...c	...c	4.4	...c	...	...	...
21	...	...	4.2	...c	...c	...c	...c	...c	...c	...c	...	...	...
22	...	...	4.2	...c	...c	...c	...c	...c	...c	...c	...	...	...
23	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
24	...	...	...c	4.5	p4.5	4.8	4.7	4.7	...c	...c	...	...	...
25	...	...	4.5	4.7	4.6	4.7	4.7	4.7	4.6	...	...	...	...
26	...	...	4.5	...c	...c	...c	...c	4.7	4.6	...a	...	...	...
27	...	...	4.4	4.5	4.5	4.6	4.8	4.5	4.6	4.5	...	...	...
28	...	...	4.5	4.6	4.7	4.6	4.7	4.6	4.6	4.5	...	...	...
29	...	...	...c	4.6	4.6	4.7	4.7	4.6	4.6	4.4	...	...	...
30	...	...	4.4	4.5	4.5	4.7	4.8	4.8	4.4	4.4	4.2	...	...
31													
* MEAN	...	...	4.4	4.6	4.6	4.7	4.7	4.6	4.5	4.4	4.2	...	...

MINIMUM VIRTUAL HEIGHT OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	200	210	210	210	220	210	p205c	180	...	...	...
2	...	...	200	220	220	p200c	200	200	190	190	...	...	...
3	...	...	...	p210c	p210c	210	200	200	200	210	...	...	...
4	...	...	230	210	210	210	200	200	200	190	...	...	...
5	...	...	220	210	210	210	200	p210c	210	200	...	...	...
6	...	...	230	220	220	210	210	210	200	200	...	...	...
7	...	...	200	210	220	200	200	200	190	...	...	...	...
8	...	...	220	...c	...c	...c	...c	...c	...c	...c	...	...	...
9	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
10	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
11	...	...	...c	200	210	210	220	p210c	210	200	...	...	...
12	...	...	210	210	210	220	220	210	210	210	...	...	...
13	...	...	220	210	210	210	200	200	190	200	...	...	...
14	...	...	...	220	210	210	200	200	200	190	...	...	...
15	...	...	...c	...c	200	...c	...c	...c	...c	...c	...	...	...
16	...	...	200	...c	...c	...c	...c	...c	200	...c	...	...	...
17	...	...	...c	240	...c	...c	...c	...c	...c	...c	...	...	...
18	...	...	...c	210	...c	...c	...c	200	200	190	...	...	...
19	...	...	220	210	210	220	200	190	190	210	...	...	...
20	...	...	220	p210c	200	200	200	200	200	200	...	...	...
21	...	...	220	220	p210c	210	200	190	200	...c	...	...	...
22	...	...	220	200	...c	...c	...c	...c	...c	...c	...	...	...
23	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
24	...	...	...c	210	p220c	190	200	200	...c	...c	...	...	...
25	...	...	200	210	200	190	200	220	220	250c	...	...	...
26	...	...	220	200	...c	...c	...c	...c	200	...a	...	...	...
27	...	...	200	210	240	200	190	200	200	210	...	...	...
28	...	...	...c	210	200	200	200	200	200	200	...	...	...
29	...	...	...c	230	p210c	200	210	200	210	200	...	...	...
30	...	...	220	200	200	200	200	200	200	210	200	...	...
31													
* MEAN	...	...	214	212	211	206	204	202	201	202	200	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 334

NOVEMBER 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1944

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	1.7	1.8	1.9	2.1	2.1	2.0	2.1	2.0	2.0	1.8	1.2	...
2	1.2	1.8	1.8	1.9	2.0	2.0	2.2	2.0	2.0	1.8	1.8	1.2	...
3	1.8	1.8	1.8	p2.0c	2.0	2.0	2.2	2.1	2.0	2.2	1.8	1.8	...
4	1.3	1.3	1.8	2.1	1.9	2.2	2.0	2.8	2.8	2.0	1.3	1.2	...
5	1.2	1.8	2.1	1.8	2.2	2.1	2.1	2.2	2.0	2.2	1.8	1.2	1.0a
6	1.2a	1.3a	2.2	2.1	2.1	2.7	2.2	1.8	1.8	1.7	1.2	1.0	...
7	1.0	1.2	1.3	2.0	2.2	2.0	2.2	2.1	1.8	2.0	1.2	1.2	...
8	1.2	1.2	1.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...e	...c	...
10	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
11	1.2	q1.4c	2.2	2.8	2.8	1.8	2.0	p2.0c	2.0	1.9	1.8	1.3	...
12	1.3	1.3	1.3	2.0	2.7	2.4	2.2	p2.2c	2.2	2.8	1.2	1.2	...
13	1.2	1.4	1.3	1.8	2.0	1.9	2.0	2.1	p2.0c	1.8	1.8	1.2	1.0
14	...c	...	...	1.8	2.1	2.2	2.2	2.3	2.5	2.0	1.2	1.1	...
15	1.1	1.1	1.8	1.9	q2.0c	2.2	2.2	2.3	2.0	2.3	1.4	1.3	...
16	1.2	1.2	1.8	2.5	2.7	2.4	2.7	2.0	1.9	2.0	1.4	1.2	...
17	1.2	1.3	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.3	...
18	1.4	p1.4c	1.9	...c	...c	...c	...c	...c	2.5	3.0	2.3	1.4	...
19	1.4	1.2	1.4	2.2	2.4	p2.4c	2.4	2.4	2.3	2.3	2.3	1.5	...
20	1.2	1.3	1.8	p2.0c	2.3	2.3	2.5	2.3	2.4	2.2	2.2	1.3	...
21	1.3	1.2	2.1	2.2	2.3	2.5	2.3	2.3	p2.3c	2.4	2.0	1.2	...
22	...c	...c	...c	2.3	...c	...c	...c	...c	...c	...c	...c	...c	...
23	1.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
24	...c	...c	...c	2.1	2.7	...c	...c	...c	...c	...c	2.0	1.8	...
25	1.6	1.8	1.8	2.0	2.0	...c	...c	...c	2.2	2.0	1.9	1.8	...
26	...c	...c	...c	...c	...c	...c	...c	2.3	2.3	2.3a	1.8	1.8	...
27	1.5	1.8	1.8	1.9	...c	...b	...b	...b	...c	...c	1.8	1.8	1.7
28	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.8	1.8	1.8	2.5
29	..c	...c	...c	...c	...c	2.2	2.2	2.3	2.2	2.0	1.3	1.2	...
30	1.2	1.2	1.3	1.4	1.5	2.2	2.2	2.4	2.6	2.6	2.0	1.8	1.2
31													
* MEAN	1.3	1.4	1.8	2.0	2.2	2.2	2.2	2.2	2.2	2.2	1.7	1.4	1.5

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2.1	2.6	3.1	...	...	...	...	...	...	...	2.6	2.3	1.2
2	2.2	2.6	3.0	...	...	...	...	...	...	3.1	2.8	2.2	1.2
3	2.2	2.8	3.1	...	...c	...	...	...	...	...	2.8	2.2	1.1
4	2.2	2.7	3.0	...	...	...	...	...	...	3.1	2.8	2.2	1.2
5	2.1	2.8	3.1	...	...	...	...	...	...	3.0	2.8	2.2	...a
6	...a	...a	3.2	...	...	...	...	...	...	3.0	2.6	2.2	1.2
7	2.0	2.8	3.0	...	...	...	...	...	...	3.0	2.9	2.2	1.2
8	2.2	2.8	3.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
10	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.2
11	2.2	2.8	...	...	...	...	...	...	...	3.0	2.8	2.2	1.2
12	...c	2.6	3.1	...	...	...	...	...	...	...	2.9	2.2	1.2
13	2.1	2.8	2.1	...	...	...	...	...	...	...	2.8	2.2	1.2
14	...c	...c	...c	...	...	...	...	...	...	...	...c	2.4	1.2
15	2.1	2.6	...	...	...	...	...	...	...	...	p2.7c	2.4	1.3
16	2.2	2.8	3.1	...	...	...	...	...	...	...	2.6	...	1.2
17	...c	...c	...c	...	...	...	...	...	...	...	...	2.8	1.2
18	2.2	...	...	...	...	...	...c	...	...	...	...	2.4	...c
19	...c	...c	...	...	...	...c	...	...	...	...	3.1	2.3	p1.4c
20	2.2	2.8	3.1	...	...	...	...	...	...	...c	...c	...c	1.2
21	2.2	p2.8c	...	...	...	...	...	...	...	...	2.7	2.4	1.2
22	...c	...c	...c	...	...c	...c	...c	...c	...c	...c	...c	...c	1.3
23	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
24	...c	...c	...c	...	...	...	...	...	...c	...c	...	...	...
25	2.8	3.2	...	...	...	...	...	4.0	...	...	...	...	...
26	...	...	q3.1c	...	...	...	...	...	...	...	...	...	1.8
27	2.3	...	...	...	3.8	...	...	...	...	3.4	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...c	3.2	...c	3.6	...c	...	...	...	...	...	2.8	2.2	1.5
30	2.3	...	...	...	...	...	...	...	...	...	3.0	...c	...a
31													
* MEAN	2.2	2.8	3.0	3.6	3.8	...	...	4.0	...	3.1	2.8	2.3	1.3

* = ALL TABULATED VALUES　　a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E　　b = LOSS OF RECORD DUE TO ABSORPTION　　c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER　　e = BELOW LOWER LIMIT OF RECORDER　　f = SPREAD ECHOES PRESENT　　g = f^0F2 EQUAL TO OR LESS THAN f^0F1　　h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY　　K = IONOSPHERIC STORM IN PROGRESS　　p = INTERPOLATED VALUE　　q = DOUBTFUL VALUE

TABLE 335

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1944 DECEMBER 1944

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	3.8f	3.4f	p3.3f	...f	...f	2.2	p5.7c	p7.2c	8.8	9.4	8.9	8.8h	7.6	p7.2c	7.6	7.5	7.8	p8.2c	p8.7a	p8.0c	7.4	6.3	...f	p4.0f	...
2	p3.9f	p3.8f	...f	...f	2.8f	2.8	p5.8c	6.8	7.8	7.9	8.2	8.6	...c	...c	...c	...c	...c	...c	...c	...c	9.2	p8.1c	p4.4f	p3.9f	...
3	p3.8f	p3.8f	...f	p2.2f	...f	2.4f	p5.9c	6.8	7.9	p8.5c	p8.6c	8.8	8.6	9.4	9.8	9.3	9.4	9.4	9.6	8.8	8.2	...f	...f	...f	...
4	...f	...a	...a	...a	...a	p2.1f	5.7	7.1	7.9	7.9	7.8	6.8	7.0	7.3	7.8	8.5	9.0	8.7	8.5	8.4	p7.6f	p5.8f	p4.8f	...f	...
5	...f	...f	...f	...f	...f	2.2f	5.4	7.0j	7.4	8.0	8.1	p8.2c	8.2	8.5	p8.1c	p7.6c	p7.6c	7.9	8.2	8.6	8.7	7.7	5.8	4.3	...
6	3.8	2.4b	...b	1.9b	2.3b	2.6	5.6	7.4	8.2j	8.5	8.6	...c	...c	...c	p9.0c	p8.8c	p8.5c	p8.7c	8.5	8.4	7.9	...f	...f	p4.8f	...
7	...f	...f	2.4	2.0f	...f	p2.3f	5.6	7.2	p8.4c	p8.6c	p8.8c	p9.0c	p9.2c	8.5	8.1	8.9	p9.5c	p9.5c	p9.5c	p8.2c	p6.9c	p6.6c	...c	...f	...
8	...f	...f	...c	p2.8c	p2.7c	p2.6c	5.6	6.6	7.7	p7.9c	8.6j	9.1	p10.0c	p10.2c	10.2	p9.6c	p9.1c	p8.6c	p8.7c	p8.8c	...f	...f	...f	...f	...
9	...c	...c	...c	...c	...c	...c	5.4	7.3	p9.0c	p8.9c	p9.0c	p9.2c	...c	...c	...c	...c	...c	...c	...c	p8.4c	p7.8c	...a	...a	p4.8f	...
10	...f	...f	p2.5f	...f	...f	p2.4f	5.8	7.6	8.2	8.2	p8.8c	p8.7c	p8.6c	8.5	8.4	8.4	8.3	7.9	p7.2c	7.1	6.8	5.8	6.6	7.6	...
11	5.5	4.3	3.8	3.6	...f	2.1f	5.5	7.1	8.4	p8.9c	p8.8c	p8.7c	p9.0c	p9.2c	p9.5c	p9.2c	p9.0c	p8.7c	8.0	7.6	7.7	8.2	8.4	6.5	...
12	3.8	2.6	2.1	2.3	1.9	2.2	5.6	7.4	p8.7c	8.8	p9.1c	p9.6j	...c	...c	...c	...c	...c	p9.5j	p9.0c	p8.6c	p8.2c	...a	...a	p5.2f	...
13	p4.8f	p4.3f	p4.2f	...f	p4.0f	p3.9f	5.8	7.5	p8.9c	8.6	9.3	...b	p9.4c	p9.1c	p9.5c	p11.7c	p10.3c	p9.0h	p8.8h	8.5	p8.5c	8.5	7.8	...a	...
14	...f	...a	...a	...a	...f	2.0f	5.4	7.7	p9.1c	p9.3c	p9.5c	p9.8c	p10.2c	p10.6c	p11.0c	p11.1c	11.3	11.5	10.6h	9.6	8.6	8.3	...f	p4.8f	...
15	p4.7f	p4.5f	p4.2f	4.1	3.2	2.6	5.9	7.4	8.6	8.8	8.5h	7.3	7.1j	p7.3c	p7.5c	8.4	8.5	8.3	8.9	p7.6c	p6.6c	p5.6c	p2.8c	p1.9c	6.3
16	...b	...b	...b	...b	...b	2.2	...c	...c	...c	...c	...c	...c	p8.4c	p8.5c	p8.5c	p8.6c	p9.2c	p9.5c	p9.3c	p8.9c	...c	...f	...f	...c	...
17	...f	...c	...c	...c	...c	2.6c	p6.3c	...c	...c	...c	...c	...c	...c	8.4	9.7	10.3	10.9	11.4	10.6	10.3	10.2	9.5	8.4	8.4f	...
18	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.8	8.5	p7.2c	...c	...c	...c	...c	...c	...c	11.0	10.3	9.6	7.9	5.5	4.8f	...
19	...f	...f	...f	...f	...f	2.5f	5.9	7.8	9.1	9.4	9.4	8.2	p7.8c	7.7	8.2	8.8	p9.2c	9.2	9.3	9.6	8.7	8.4	7.0	5.6	...
20	3.7j	p3.5c	3.2	3.1	3.2	p2.6f	5.6	7.9	9.7	9.5	8.5h	6.9	7.1	7.0	7.1	8.2	8.7	8.5	p8.5c	7.3j	6.8	6.6	6.2	2.9	6.3
21	...b	...b	1.3b	...f	...a	2.3	5.8	7.9	9.2	p9.6h	9.6h	7.9h	7.9h	8.1	8.4	p9.0c	9.1	9.2	8.8	8.4	7.4	5.7	5.0	4.7	...
22	2.8	2.3	2.3f	...f	...f	...a	p5.6c	7.5	8.1	8.6	8.6	8.2	8.2	8.4	8.4	8.3	9.0	8.7	p8.9c	8.5	6.8	5.3	4.0	2.9	...
23	2.2	p2.2f	...f	...f	p1.7f	...f	p5.8c	7.6j	8.6	8.5	7.7	7.5	p7.7c	8.5	p8.5c	8.4	8.6	8.8j	9.2	9.1	7.2	5.6	5.6	p4.4c	...
24	p3.3f	...f	...f	...f	...f	p2.8f	5.0	7.6	8.0j	p9.0c	8.7	p8.0c	p8.3c	p8.7c	p9.1c	9.6	9.8	10.2	9.6j	9.2	8.2	6.0	p5.7c	...c	...
25	...c	...c	...c	...c	...c	...c	...c	7.4	8.8	9.1	9.2	8.6	8.9	8.9j	9.5	9.9	9.8	9.5	9.8	9.2	8.5	...a	...f	...f	...
26	...f	p2.5f	p2.9f	...f	...f	...f	5.0	7.2	7.8j	p8.4c	9.0	9.3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
27	...c	...c	...c	...c	...c	...c	...c	...c	...c	p9.3c	p8.5c	p8.9c	p9.7c	p10.5c	p11.3c	12.1	8.4	p9.2c	p10.0c	8.8	9.0	8.5	p8.3c	...c	...
28	...c	...c	...c	...c	...c	1.8	...c	...c	...c	8.1	8.4	8.6	8.7	p9.5c	p10.3c	p11.2c	p10.0c	p10.0c	9.5	8.3h	6.5	5.6	p4.6f	...f	...
29	...f	p4.2f	p3.8f	3.3	2.5	2.5	6.0	7.6	8.4	7.9	7.0	7.1	7.7	8.4	...c	...c	...c	9.7	9.5	9.0	8.3	7.3	6.0	4.0f	...
30	3.2f	2.6f	2.7f	2.4	2.6	2.0h	5.4	7.2	8.3	7.8	6.7	7.0	7.3	7.9	8.5	9.8	9.4	9.0	8.7	8.2	7.2	5.0f	4.2f	p2.5f	6.1
31	p2.4f	p2.5f	p2.5f	p2.4f	p2.5f	p2.3f	5.8	6.8	p6.9	6.9	6.6	6.8	...c	...c	...c	p6.1	...c	...c	...c	7.5	6.6	5.1	4.4	...c	...
MEAN*	3.7	3.3	2.9	2.7	2.7	2.4	5.6	7.3	8.4	8.6	8.5	8.2	8.4	8.6	8.9	9.2	9.2	9.2	9.1	8.6	7.9	6.8	5.8	4.6	6.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 338

DECEMBER 1944 — DECEMBER 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	360	330	320	350	570	300	230	270	280	320	390	360	380	380	360	310	230	230	260	270	280	310	350	320	323
2	340	350	330	350	230	250	240	220	270	320	350	380	370	350	320	320	340	250	260	270	280	310	370	370	310
3	350	300	290	280	320	320	240	230	300	p330c	370	360	390	330	340	330	250a	250	260	280	320	330	330	320	309
4	280	290	280	310	380	280	230	230	300	330	400	400	400	380	360	320	310	240	250	250	300	300	340	370	314
5	370	410	430	370	270	280	230	220	290	330	350	p380c	400	350	360	350	q230c	240	250	240	230	260	270	300	309
6	310	320b	...b	300b	280b	270	240	220	290	320	350	...c	...c	...c	350	350	220	260	240	280a	310	380	400	330	...
7	240	240	270	270	270	310	240	230	290	300	p310c	p330c	340	350	370	350	310	240	260	250	280	260	290	280	287
8	270	300	300	300	350	280	230	q250c	300	320	340	320	360	360	350	340	320	230	250	280	300	300	340	360	306
9	400	...c	...c	...c	360	300	240	220	300	320	360	350	330	350	330	330	220	220	250	300	350	300	360	330	...
10	300	290	320	330	...a	300	240	240	280	350	350	360	360	350	360	370	210	240	260	270	280	260	250	230	...
11	210	240	280	340	370	300	240	230	300	320	340	350	350	350	340	350	230	230	270	270	280	250	230	250	288
12	260	300	310	320	350	290	240	230	280	300	320	320	360	370	350	320	200	240	260	280	q300a	...a	...a	330	...
13	310	280	300	310	280	250	240	210	280	300	330	...b	370	350	330	310	220	250	270	260	270	270	300	...a	...
14	...a	...a	...a	...a	390	310	260	240	300	320	330	q340c	p360c	350	350	330	320	230	250	280	300	330	340	320	...
15	300	300	240	230	220	250	230	240	300	370	380	380	380	380	400	350	p310c	260	250	220	230	290	p350c	400	302
16	...b	...b	...b	...b	...b	280	240	260	310	q350c	q360c	q360c	p350c	p370c	380	q400c	p350c	q300c	250	240	270	310	300	380	...
17	...f	...c	...c	390	300	330	240	p260c	p300c	280	p380c	p370c	p360c	350	300	280	210	240	270	260	270	300	310	270	...
18	...c	q250c	q270c	q270c	q260c	q270c	q250c	q220c	p290c	350	q350c	q360c	...c	...c	...c	...c	...c	...c	260	260	290	330	360	360	...
19	400	420	410	350	300	250	250	260	300	320	350	350	p380c	380	350	340	p210c	230	260	290	280	300	300	330	317
20	330	p290c	250	260	300	290	250	240	320	360	390	440	460	440	410	330	300	240	260	260	300	290	340	490	327
21	...b	...b	...b	450	...a	310	240	230	310	380	360	360	430	410	380	p350c	320	q230c	260	280	300	320	360	350	...
22	350	340	340	330	350	...a	p240c	230	310	330	350	440	410	390	380	370	320	260	p250c	240	250	300	350	360	...
23	350	350	320	300	280	300	p240c	230	320	320	390	400	430	400	370	370	...c	240	250	270	310	340	340	320	...
24	350	380	350	330	280	300	250	250	320	340	360	390	410	...c	...c	350	340	240	270	270	320	340	350	340	...
25	360	380	400	...c	...c	370	270	240	320	350	360	380	390	360	370	360	230	230	270	290	330a	410	400	420	...
26	350	290	270	320	280	320	260	230	320	...c	380	360	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
27	...c	...c	...c	...c	...c	...c	...c	...c	...c	340	350	350	350	340	330	330	p300c	260	280	310	350	340	320	...c	...
28	...c	...c	...c	...c	...c	350	...c	...c	...c	340	370	330	360	320	...c	320	230	250	270	300	340	340	380	370	...
29	350	330	270	240	230	250	250	230	340	380	380	390	350	360	350	340	310	300	270	290	290	280	290	...f	...
30	330f	330	250	250	240	270h	250	290	320	360	420	400	390	360	340	320	340	230	260	270	350	380f	370f	360	320
31	340f	340f	320f	270f	250	p250	240	320	280	400	430	390	350	320	300	p320	...c	...c	...c	270	260	270	270	...c	...
MEAN*	325	319	310	313	308	291	243	240	301	332	363	369	378	363	353	338	273	245	259	270	294	310	330	341	311

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 337

DECEMBER 1944 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — DECEMBER 1944

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	4.1	4.3	4.4	4.6	4.6	4.5	4.5	4.4	4.1	...	...	...
2	...	...	4.3	4.6	4.7	4.7	...c	...c	...c	...c	...c	...	...
3	...	...	4.5	p4.5c	4.6	4.5	4.5	4.5	4.5	4.2	...	...	...
4	...	...	4.3	4.4	4.4	4.5	4.4	4.4	4.5	4.2	4.2	...	...
5	...	...	4.4	4.4	4.5	p4.5c	4.6	4.4	...c	...c	...	...	...
6	...	...	4.3	4.6	4.5	...c	...c	...c	4.6	4.4	...	...	...
7	...	...	4.6	4.5	p4.5c	p4.6c	4.6	4.6	4.5	...c	...c	...	...
8	...	...	...c	...c	4.6	4.5	4.7	4.7	...a	4.7	4.4	...	...
9	...	...	4.4	4.5	4.8	4.6	p4.7c	4.5	4.6	4.3	...	...	...
10	...	...	4.5	4.6	4.7	4.7	4.7	4.5	4.5	4.4	...	...	...
11	...	...	4.3	4.5	4.6	4.6	4.6	4.7	4.4	4.4	...	...	...
12	...	...	4.5	4.6	4.6	4.7	4.8	4.8	p4.6c	4.4	...	...	...
13	...	...	4.4	4.6	4.8	...b	4.8	4.9	4.7	4.5	...	...	...
14	...	...	4.5	4.6	4.7	p4.7c	p4.7c	4.7	4.8	4.6	4.5	...	...
15	...	...	4.8	4.9	4.9	4.7	4.8	4.8	4.6	4.7	...	...	...
16	...	...	...c	...c	...c	...c	p4.8c	p4.8c	4.8	4.7	...c	...	...
17	...	...	...c	...c	p5.0c	p5.0c	p5.0c	5.1	4.9	...c	...	...	...
18	...	...	...c	4.9	5.0	p4.9c	...c	...c	...c	...c	...c	...	...
19	...	...	4.6	4.8	4.8	4.8	p4.7c	4.8	4.7	4.6	...	...	...
20	...	...	4.7	4.8	4.9	4.9	4.8	...c	q4.8c	...c	p4.5c	...	...
21	...	...	4.7	4.8	4.8	4.8	4.9	4.8	4.8	p4.5c	4.5	...	...
22	...	...	4.7	4.7	4.8	4.8	4.7	4.8	4.6	4.6	4.2	...	...
23	...	...	4.8	p4.8c	4.9	p4.9c	p4.9c	p4.8c	p4.7c	p4.7c	...	...	...
24	...	...	4.7	p4.8c	p4.9c	p4.9c	p5.0c	p4.8c	p4.7c	4.6	4.3	...	...
25	...	...	4.6	4.7	4.7	4.8	4.8	4.8	4.7	4.6	...	...	...
26	...	...	4.7	p4.7c	p4.8c	4.8	...c	...c	...c	...c	...	...	...
27	...	...	...c	4.8	5.1	4.7	5.0	4.8	4.9	4.7	...	...	...
28	...	...	...c	4.7	4.7	4.7h	4.8	4.7	p4.6c	4.5	...	...	...
29	...	...	4.7	4.7	4.6	4.3	4.6	4.7	...c	4.5	4.4	...	...
30	...	...	4.6	4.5	4.7	4.5	4.6	4.6	4.4	4.3	4.5	...	...
31	...	4.1	4.2	4.8	4.6	4.6h	4.6h	4.5	4.3h	4.2	...c	...c	...c
* MEAN	...	4.1	4.5	4.6	4.7	4.7	4.7	4.7	4.6	4.5	4.4	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	220	200	210	200	200	200	200	200	180	...	...	...
2	...	...	200	210	210	210	...c	...c	...c	...c	210	...	...
3	...	...	230	p220c	230	210	220	200	200	200	...	...	...
4	...	...	210	210	200	210	210	200	200	200	210	...	...
5	...	...	210	210	p200c	p200c	200	200	...c	...c	...	...	...
6	...	...	200	200	210	...c	...c	...c	210	210	...	...	...
7	...	...	210	210	p210c	p200c	200	210	230	...c	...c	...	...
8	...	...	...c	...c	200	210	200	210	...a	p220c	220	...	...
9	...	...	210	220	220	210	p220c	210	210	...c	...	...	...
10	...	...	p210c	220	220	220	200	200	200	p210c	...	...	...
11	...	...	220	210	210	210	220	200	200	200	...	...	...
12	...	...	200	200	200	210	210	210	p200c	200	...	...	...
13	...	...	200	210	210	...b	210	210	...c	210	...	...	...
14	...	...	210	200	210	p200c	p200c	200	200	210	230	...	...
15	...	...	210	p210c	210	p200c	200	...c	...c	...c	...	...	...
16	...	...	...c	...c	...c	...c	p220c	...c	...c	...c	...c	...	...
17	...	...	...c	...c	...c	...c	...c	...c	...c	230	...	...	...
18	...	...	p220c	210	210	...c	...c	...c	...c	...c	...c	...	...
19	...	...	230	...c	200	200	p200c	190	200	220	...	...	...
20	...	...	220	220	210	p200c	210	...c	...c	...c	200	...	...
21	...	...	200	210	200	210	200	200	200	p200c	210	...	...
22	...	...	200	210	200	200	210	210	190	200	200	...	...
23	...	...	200	...c	...c	...c	...c	...c	...c	...c	...	...	...
24	...	...	...c	...c	...c	...c	...c	...c	...c	210	...c	...	...
25	...	...	230	230	220	210	210	210	200	220	...	...	...
26	...	...	220	...c	...c	220	...c	...	...	...	...	...	...
27	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
28	...	...	...c	230	210	200h	190	200	p200c	200	...	...	...
29	...	...	210	210	200	200	200	200	...c	...c	...c	...	...
30	...	...	220	220	200	200	200	180h	190	190	230	...	...
31	...	240	210	240	200	180h	180h	190	200h	300	...c	...	...
* MEAN	...	230	211	214	208	205	205	202	202	211	214	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f°F2 EQUAL TO OR LESS THAN f°F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 338

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1944 | DECEMBER 1944

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	1.5	2.0	2.1	2.2	2.7	2.7	2.5	2.2	2.0	1.8	1.5	1.4a
2	1.3	2.0	2.0	2.4	2.2	2.4	...c	...c	...c	...c	...c	...c	...c
3	1.2	1.2	1.4	p2.1c	2.2	2.2	2.2	2.3	2.4	1.8	1.8a	1.2a	...
4	1.2	1.2	1.4	1.4	2.0	2.2	2.1	2.2	2.0	2.2	1.3	1.2	...
5	1.2	1.4	1.8	1.8	2.0	2.0	2.0	2.1	1.8	1.8	1.8	1.8	1.2
6	1.2	1.2	2.0	2.0	2.0	...c	...c	...c	2.3	1.8	1.2	1.2	0.9
7	1.1	1.2	1.2	2.0	p2.1c	p2.2c	2.4	2.3	2.3	1.8	1.8	1.4	1.4
8	1.4	1.5	1.8	p2.0c	2.4	2.4	2.5	2.4	2.4	1.9	2.0	1.2	1.1
9	1.2	1.2	1.3	2.0	2.2	2.2	p2.4c	2.3	2.0	p1.8c	1.2	1.2	1.2
10	0.9	p1.5c	2.4	2.3	2.3	p2.3c	2.4	2.4	p2.2c	p2.1c	2.0	1.2	1.2
11	1.1	1.2	1.2	1.9	2.0	2.3	2.3	2.0	2.2	2.2	1.8	1.2	...
12	1.2	1.2	1.8	2.2	2.0	2.3	2.3	2.3	2.3	2.0	1.8	1.2	...
13	1.2	1.2	2.2	1.8	2.0	...b	2.5	2.2	2.0	1.8	2.4	1.2	1.1a
14	1.8	1.8	1.8	1.9	2.1	2.2	2.4	2.2	2.0	1.9	1.2	1.2	1.2
15	1.0	1.8	2.0	2.0	2.1	2.4	2.5	2.6	2.4	2.0	2.4	1.2	0.9
16	...	...c	...c	...c	...c	...c	...c	...c	...c	2.2	...c	...c	1.3
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
18	...c	...c	...c	2.3	...c	...c	...c	...c	...c	...c	...c	...c	...c
19	1.2	1.2	1.2	1.8	2.0	2.3	p2.2c	2.2	2.2	2.2	p1.3c	1.2	1.2
20	1.2	1.2	1.2	2.2	2.3	2.2	2.3	p2.3c	q2.3c	p2.2c	2.0	q2.1c	...
21	1.2	1.2	1.2	1.3	1.8	1.9	1.8	1.7	1.8	p1.8c	1.2	1.2	1.2
22	0.6	1.2	1.2	1.8	1.8	1.9	2.0	1.9	1.9	1.9	1.7	1.0	1.1
23	0.9	1.3	1.6	...c	...c	...c	...c	...c	...c	...c	p1.8c	1.4	...
24	1.2	1.3	1.7	...c	...c	...c	...c	...c	...c	1.8	1.9	1.3	1.2
25	...	1.8	1.8	1.8	1.9	2.0	1.9	...b	2.0	2.0	1.7	1.6	1.2
26	1.2	1.3	1.4	...c	...c	...c	...c	...	...	...	...	...	...c
27	...c	...c	...c	1.7	2.0	p2.0c	p2.0c	2.0	2.0	1.7	...c	...	...
28	...c	...c	...c	1.9	1.8	2.0	...c	...c	...c	1.3	1.3	1.2	1.2
29	1.2	1.2	1.2	1.4	1.3	q2.0	q2.3	q2.3	...c	1.4	1.3	1.3	1.2
30	1.2	q1.2	1.2	1.2	1.8	1.8	1.9	2.0	2.0	1.3	1.2	1.1	1.2
31	1.2	1.2	1.5	2.2	2.1	1.8	...c	...c	...c	...c	...c	...c	...c
* MEAN	1.2	1.4	1.6	1.9	2.0	2.2	2.2	2.2	2.1	1.9	1.7	1.3	1.2

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2.2	2.8	...	...	...	...	...	...	...	...	3.0	2.2	...a
2	1.8	2.6	3.2	...	...	...	...c	...c	...c	...c	...c	...c	...c
3	1.9	2.7	3.1	...c	...	...	...	...	...	...	...a	2.3a	...
4	2.2	2.7	3.2	...	...	...	...	...	...	3.2	2.9	2.3	1.3j
5	2.1	2.6	3.2	...	...	...c	...	...	...c	...c	2.8	2.4	1.4
6	2.2	2.8	3.0	...	...	...c	...c	...c	...	...	2.9	2.6	...a
7	2.3	2.7	3.2	...	...c	...c	...	...	...	...c	...c	...c	1.5
8	2.4	2.7	...	...c	...	...	...	...	...a	...	...	2.3	1.4
9	2.2	2.8	...	...	...	...	...	...	...	...	2.8	2.3	1.7
10	...a	...c	...	...	...	...	...	...	...	...	3.0	2.5	1.5
11	2.1	2.7	3.0	...	...	...	...	...	...	...	3.0	2.6	...
12	2.2	2.6	3.0	...	...	...	...	...	...c	...	3.1	...a	...
13	2.2	2.8	3.1	...	...	...b	...	...	...	...	3.0	2.6	2.4
14	2.4	2.9	3.2	...	...	...	...	...	...	...	3.0	2.6	1.5
15	2.1	2.8	3.2	...	...	...	...	...	...	...	...c	2.5	1.6
16	2.2	...c	...c	...c	...c	...c	...c	...c	...c	...	...c	...c	...c
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	3.1	...c	...c
18	p2.0c	...c	...c	...	...	...c	...c	...c	...c	...c	...c	...c	1.4
19	2.1	2.6	3.0	...	...	...	...	...	...	...	p2.8c	2.7	1.4
20	2.0	2.7	3.2	...	...	...	...	...	...c	...c	3.0	2.6	...
21	2.2	2.5	3.0	...	...	...	...	...	...	...	3.0	p2.6c	1.8
22	2.0	2.6	3.0	...	...	...	...	...	...	...	2.8	2.5	2.0
23	2.1	2.8	...c	...	...	...	...	...	...	...	...c	p2.6c	...
24	2.1	...c	...c	...c	...c	...c	...	...	...	...	...c	...c	...
25	...	2.8	3.2	...	...	...	...	...	...	...	p2.9c	2.4	...
26	2.1	2.6	3.0	...c	...c	...	...c	...c	...c	...c	...c	...c	...
27	...c	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
28	2.0	...c	...c	...	...	...	...	...	...c	...	2.8	2.5	1.8
29	1.9	2.6	3.0	...	...	...	...	...	...c	...	...	...	...
30	2.4	2.7	3.1	...	...	...	...	3.4	3.5	3.3	3.3	2.6	1.8
31	2.2	...	3.5	...	...	...	...c	3.6	3.6	...c	...c	...c	...c
* MEAN	2.1	2.7	3.1	...	...	...	...	3.5	3.6	3.2	3.0	2.5	1.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 339

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1945 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JANUARY 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...c	...c	...c	...c	...c	...c	...c	7.0	7.1	6.4	6.3	6.3	6.5	7.1	p7.8c	p8.7c	p9.5c	p9.5c	p8.7c	8.4	6.6	5.9	5.0	p4.8c	...
2	...c	...c	...c	...c	...c	...c	p5.3c	7.0	8.2	8.5	p7.4c	p7.5c	8.2	p8.5c	p8.8c	p8.8c	8.5	8.8c	7.9	p6.9c	5.9	p5.3c	p4.7c	4.0f	...
3	3.2	2.7f	2.4b	1.3	...b	1.8b	5.3	6.7	7.1	6.4	6.2	6.1	6.4	6.5c	6.8	7.5	8.5	8.9	p9.0c	7.7	6.5	p4.8f	p4.7f	4.6f	...
4	4.2f	p3.5f	...f	...f	...b	...b	p5.2	6.7	7.4	p8.4c	p8.5c	8.1h	6.7	7.0	7.3	7.8	p8.8c	p8.4c	p8.1c	7.8	7.0	6.3	5.3h	3.4h	...
5	2.5	2.3	...f	...f	...b	p1.3f	4.9	6.9	8.2	7.2	6.4	6.5	7.0	7.4	7.4j	8.2	8.5	8.5	8.5	p9.0c	8.1	...f	...f	...a	...
6	...f	p4.4f	p3.7f	2.2f	1.5b	1.5b	5.0	6.7	8.0	7.8	6.6	6.8	7.4	7.5	8.1	p8.7c	p8.7c	p8.5c	8.4	8.2	6.9	5.4	p4.0f	...f	...
7	...f	...f	p3.1f	p2.8f	2.8f	2.8	5.5	7.2	8.0	8.0	6.2c	6.1	p6.5c	7.4	8.0	8.5	8.7	8.5	8.5	7.9	6.7	4.8	4.3f	3.2f	...
8	p2.7f	p2.4f	p2.4f	2.2f	...f	...f	5.3	7.1	7.9	8.5	p8.8c	p8.8c	p8.4c	7.7	7.1	7.7	8.3	8.6	p8.8c	p8.8c	p8.0c	7.4	6.8	p5.4f	...
9	p4.8f	4.9f	p4.2f	3.3f	2.9	2.1	5.0	7.3	8.2	p8.8c	8.8h	6.3h	8.1	8.5	p8.7c	p8.0c	p9.0c	9.7	8.5h	8.1	8.4h	8.1	7.8	7.5	7.1
10	7.3	6.7	6.4	5.3	4.6	4.1	5.4h	7.0	8.3	7.7	7.5	7.6	8.0	7.8	8.1	8.1	p8.6c	p8.7c	p9.1c	p9.6c	8.2	7.0f	...f	...f	...
11	...f	5.8f	4.5	3.5	3.1	2.8	5.1	7.2	8.0	8.0	7.8	8.0	9.2	9.9	9.9	p9.9c	p9.9c	9.4	9.0h	8.0	7.8	...c	...c	...c	...
12	p5.9c	3.8	3.3j	2.7	p2.4f	...f	4.5	6.6	7.7	p7.3c	6.8	6.7	7.4	8.3	8.3	8.8	9.0	8.7	9.2	8.5h	8.0	7.7	p7.8c	...f	...
13	5.9	5.1	4.9f	...f	...f	...f	5.4	6.7	8.0	9.0	8.5	8.6	8.7	p11.4c	10.9	10.8	9.9	9.0	9.0h	9.2	8.0	6.4	5.6	5.5	...
14	4.2	3.1	...b	...b	...b	...b	4.8	6.6	7.6	7.5	8.0	8.4	8.5	9.4	p10.8c	p10.1c	p9.5c	8.8	8.4	7.8	7.1	5.8	...f	...f	...
15	...f	...b	...b	...b	...b	...b	5.0	7.5	9.0	9.3	8.5h	8.0h	7.6	8.6	10.1	10.1	9.3	8.4	8.9	8.0	6.4	5.6	5.6	4.8	...
16	3.5	2.6	2.5	2.4	p2.3f	p2.3f	4.9	7.3	8.0	p7.9c	7.2	p7.6c	p8.1c	8.3	9.0	9.2	9.2	p9.1c	p9.0c	p7.9c	p6.8c	p7.0c	...f	...f	...
17	...f	p4.5f	p4.6f	p4.5f	...f	p2.5f	5.3	7.7	8.7	8.8	8.5	...c	...c	...c	p9.4c	p9.7c	10.3	9.0	9.2	9.3	p6.0c	p6.7c	5.8	p5.5c	...
18	5.0f	4.0f	...f	p3.4f	p2.5f	2.5f	4.8	7.3	8.8	p9.1c	9.0h	p7.9c	6.8h	p6.6c	p7.3c	p8.0c	8.6j	9.0	9.2	9.2	8.2	6.7	...f	p4.6f	...
19	...f	p4.0f	...f	...f	...f	...f	4.8f	7.2	8.3	8.9	9.6	9.3	8.4	8.0	9.4	9.5	9.4	9.2	9.7	9.8	8.9	7.8	8.4	8.5	...
20	8.4	7.1	6.8	5.8	4.6	3.3j	5.0	7.3	8.5	9.5	9.3h	8.2	6.8	7.4	7.8	8.4	8.8	8.9	9.5	9.2	8.0	...f	...f	...f	...
21	...f	p3.3f	...f	p2.7f	...f	p2.7f	4.9	7.2	8.5	8.6	8.2h	6.8	6.6	6.5	7.0	7.8	8.3	8.9	9.3	9.0	8.1	6.6	6.5f	...f	...
22	p5.6f	p5.0f	p5.2f	...f	...f	p3.7f	5.6f	6.8	p8.3c	8.5	8.3h	6.6	6.3	6.4	6.6	6.8	7.1	7.6	8.4	8.4	7.7	7.0	5.9	5.7	...
23	5.6	4.3	3.7	...f	...f	p3.0f	4.6f	7.0	7.4	7.8	8.2	8.3h	7.2	7.4	7.2	7.7	7.6	7.7	8.4	9.1	8.3	7.3	p6.3f	p5.6f	...
24	...f	p5.4f	...f	...f	...f	...f	5.3f	6.9	7.8	8.8	8.8	9.3h	8.5h	7.8	8.4	8.5	8.1	7.5	7.2	7.7	p6.5c	p4.7f	p4.4f	...f	...
25	...f	...f	...f	...f	...f	...f	5.0	6.9	7.6	8.6	8.6	8.5h	7.9	7.8	8.2	8.4	8.6	8.7	8.6	9.2	8.9	8.2	7.8	p7.8c	...
26	6.7	4.0	3.0h	p2.6	...a	...f	4.0	6.9	8.5	8.6	p9.1c	9.6	9.3	8.7h	7.8	7.6	8.6	8.6	8.4	7.6	...f	...f	...f	...a	...
27	...a	...f	p4.6f	4.2f	3.9f	3.3f	5.0	7.5h	8.0	9.1	9.3	9.0	8.8	8.8	9.3	9.7	10.1	10.3	10.9	10.0	8.4	...f	p6.4f	6.1	...
28	4.7f	4.2	3.7	3.1	p2.4f	1.5	4.4	6.9	8.0	9.1	8.5h	7.4	7.4	7.4	7.9	8.2	8.9	9.2	9.2	9.2	...a	...f	...a	...f	...
29	...f	...f	...f	...f	4.5	...f	4.3	7.2	8.4	9.1	8.9	8.5	8.0	8.2	8.7	9.5	10.1	10.2	10.3	10.0	9.6	7.7j	6.7j	4.6	...
30	3.8	...f	...f	...f	...f	p2.5f	4.4	7.2	8.8	8.9	8.0	7.5	7.6	8.0	8.6	9.1	9.2	9.7	9.7	9.9	9.3	p8.5a	...f	...f	...
31	...f	p4.5f	p4.0f	p4.0f	4.4f	3.2f	4.7	6.7	7.6	8.4	8.4h	7.0	6.6	p6.7c	7.1	7.5	8.0	8.4	8.4	7.8	7.7	6.5	5.6	5.4	...
MEAN*	4.9	4.2	4.1	3.3	3.2	2.6	5.0	7.0	8.1	8.3	8.1	7.8	7.6	7.9	8.3	8.6	8.9	8.8	8.9	8.6	7.7	6.6	6.0	5.4	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 340

JANUARY 1945 — JANUARY 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...c	...c	...c	...c	...c	...c	...c	300	340	340	400	410	440	370	330	310	310	230	250	290	320	360	350	370	...
2	...c	...c	...c	...c	...c	...c	q270c	230	320	350	350	380	350	350	330	320	300	230	260	p280c	290	p290c	p290c	300	...
3	290	270	260	270	...b	360	250	290	320	340	460	460	480	400	370	370	320	240	260	280	350	350	330	310	...
4	300	300	310	320	280	280	240	230	310	p320c	400	410	400	400	380	360	p330c	p230c	270	250	250	250	210	220	302
5	250	290	370	380	420	390	260	320	330	320	440	440	420	390	390	360	320	240	260	280	340	390	380	330	346
6	270	240	250	250	270	400	250	240	320	380	390	390	390	370	360	320	220	230	270	270	280	340	370	360	310
7	370	310	250	260	250	250	240	220	290	350	440	p420c	p400c	400	350	330	300	230	240	250	290	310	330	310	308
8	300	280	280	250	250	270	240	210	300	310	350	400	p380c	400	380	380	250	240	240	320	250	280	320	300	299
9	280	260	270	270	240	250	240	220	300	350	380	370	370	400	360	350	360	230	240	250	260	300	310	310	299
10	330	300	320	250	250	280	270	290	330	360	380	400	400	360	350	330	330	230	260	270	320	370	330	330	318
11	270	240	240	250	240	260	260	230	330	350	370	400	350	340	340	q340c	q330c	240	260	250	250	290	260	250	289
12	230	240	260	270	290	280	250	220	330	p350c	380	420	410	360	370	350	330	210	260	270	300	360	350	300	308
13	290	280	280	270	310	250	q260c	q240c	310	350	360	360	370	330	320	330	330	240	260	260	290	330	340	290	302
14	260	250	...b	...b	...b	...b	250	240	320	360	360	370	380	360	p330c	p310c	p290c	250	280	290	300	330	370	390	...
15	440	...b	...b	350b	...b	300b	270	230	310	330	350	310	400	410	300	300	200	240	270	250	230	230	230	240	...
16	250	270	290	310	320	330	260	240	320	p360c	360	p380c	400	410	330	q340c	340	p250c	260	270	330	340	350	330	318
17	340	310	380	250	250	240	250	230	300	350	350	380	410	400	330	360	280	240	260	230	230	220	230	250	295
18	270	270	240	250	280	270	260	230	310	350	360	390	400h	430	370	300	320	250	260	270	300	350	380	350	311
19	350	330	380	390	340	300	260	240	300	330	370	390	390	470	340	350	240	240	270	270	280	300	260	250	318
20	240	260	250	240	230	250	290	q310c	330	340	360	400	420	420	350	350	320	250	260	290	350	410	430	360	321
21	340	380	320	300	280	250	250	280	300	360	410	440	440	440	420	350	320	240	250	270	280	310	320	300	327
22	290	280	300	280	290	270	250	230	310	360	400	400	470	440	410	390	360	260h	250	260	250	250	300	270	315
23	250	250	300	320	320	260	260	230	300	320	380	400	420	410	390	380	230	240	250	260	310	340	320	310	310
24	310	280	360	290	310	260	240	230	300	310	380	400	390	410	380	370	350	220	280	300	350	380	400	360	328
25	300	260	280	290	280	270	250	220	310	330	370	400	380	380	350	350	340	240	250	250	260	260	280	300	300
26	250	230	250	240	...a	230	260	220	280	330	p350c	360	410	410	400	360	230	230	260	320	380	440	490	440	...
27	330	280	260	250	270	290	260	230	310	320	370	400	400	380	360	370	200	290	260	290	270	420	390	260	311
28	300	310	300	320	390	480	270	240	230	320	360	360	380	390	370	330	320	230	250	250	290	300	320	310	318
29	320	250	250	240	240	270	250	230	310	320	310	400	390	390	360	330	190	230	250	250	230	230	220	230	279
30	300	320	330	260	280	260	260	230	220	330	340	390	390	380	340	330	190	240	260	310a	330a	320a	350	380	306
31	340	310	270a	240	240	230	250	230	310	340	380	380	430	390	360	360	200	240	250a	240	230	260	290	300	295
MEAN*	299	280	291	281	285	287	256	243	306	340	376	394	402	393	359	345	289	239	258	271	290	320	326	310	310

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 341

JANUARY 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1945

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...c	4.1	4.1	4.3	4.7	4.6	4.8	4.6	4.5	4.3	4.2	...	...
2	...	...	4.3	4.4	4.5	4.7	4.6	4.4	4.5	4.5	4.2	...	...
3	...	4.1	4.4	4.4	4.6	4.5	4.7	4.6	4.4	4.5	4.2	...	...
4	...	...	4.4	p4.4c	4.8	4.5	4.6	4.5	4.6	4.4	p4.3c	...	...
5	...	4.1	4.3	4.3	4.6	4.5	4.6	4.5	4.5	4.5	4.1	...	...
6	...	...	4.2	4.5	4.5	4.5	4.6	4.6	4.5	4.4	...	...	...
7	...	...	4.4	4.7	4.6	p4.6c	p4.6c	4.5	4.5	4.5	4.4	...	...
8	...	...	4.4	4.5	4.7	4.6	p4.6c	4.6	4.6	4.5	...	...	...
9	...	...	4.3	4.6	4.7	4.6	4.6	4.8h	4.6	4.5	4.4	...	...
10	...	3.8	4.4	4.5	4.7	4.7	4.7	4.7	4.5h	4.6	4.5	...	...
11	...	...	4.6	4.5	4.8	4.7	4.6	4.6	4.5	p4.5c	p4.3c	...	...
12	...	...	4.3	p4.5c	4.7	4.7	4.8	4.7	p4.6c	4.5	4.5	...	...
13	...	...c	4.4	4.8	4.8	4.7	4.9	p4.7c	4.6	4.5	4.5	...	...
14	...	...	4.3	4.6	4.5	4.7	4.7	4.6	p4.7c	...c	...c	...	...
15	...	...	4.4	4.5	4.6	4.7	4.7	4.7	4.5	4.6	...	...	...
16	...	...	4.5	p4.6c	4.5	p4.7c	4.8	4.8	4.6	p4.5c	4.5	...	...
17	...	...	4.5	4.8	4.7	4.9	4.8	4.8	p4.7	p4.4	4.4	...	...
18	...	...	4.5	4.6	4.7	4.7	4.6	4.6	4.5	4.5	...	...	...
19	...	...	4.4	4.6	4.6	4.7	4.8	4.6	4.5	...c	...	...	...
20	...	...c	4.4	4.5	4.7	4.8	4.7	4.7	4.6	4.5	4.2	...	...
21	...	4.0	4.4	4.7	4.5	4.6	4.8	4.7	4.7	4.5	4.2	...	...
22	...	...	4.3	4.6	4.5	4.6	4.7	4.6	4.6	4.4	4.2	...	...
23	...	...	4.4	4.5	4.6	4.6	4.6	4.6	4.5	4.5	...	...	...
24	...	...	4.4	4.5	4.6	4.6	4.5	4.6	4.5	4.5	4.3	...	...
25	...	...	4.5	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.4	...	...
26	...	...	4.2	4.6	p4.6c	4.7h	4.7	4.6	4.6	4.4	...	...	...
27	...	...	4.4	4.7	4.6	4.7	4.6	4.6	4.6	4.5	...	...	...
28	...	...	...	4.5	4.7	4.6	4.7	4.7	4.6	4.3	4.3	...	...
29	...	...	4.5	4.4	4.5	4.7	4.7	4.7	4.6	4.4	...	...	...
30	...	...	...	4.4	4.6	4.8	4.6	4.7	4.5	4.5	...	...	...
31	...	...	4.4	4.5	4.6	4.6	4.6	4.6	4.5	4.4	...	...	...
*MEAN	...	4.0	4.4	4.5	4.6	4.6	4.7	4.6	4.6	4.5	4.3	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...c	220	210	190	190	190	190	200	190	220	220	...	...
2	...	...	220	200	180	200	190	190	180h	210	220	...	...
3	...	220	200	210	200	200	210	200	200	220	220	...	...
4	...	...	210	p210c	200	200	200	190	160	190	p170c	...	...
5	...	230	220	200	200	200	210	200	180	160h	180	...	...
6	...	...	220	210	210	200	190	180	180	190	...	...	...
7	...	...	210	200	200	195	p190c	190	200	...a	220	...	...
8	...	...	210	200	200	200	p190c	190	180	180	...	...	...
9	...	...	210	210	200	200	200	190	200	190	220	...	...
10	...	230	230	210	200	200	200	210	200	200	210	...	...
11	...	...	230	210	220	210	200	200	200	q200c	q200c	...	...
12	...	...	220	p210c	200	200	200	210	p210c	200	200	...	...
13	...	...c	210	220	210	200	200	...c	200	170	200	...	...
14	...	...	230	220	210	200	210	200	p200c	p200c	p200c	...	...
15	...	...	220	210	200	200	200	200h	220	200	...	...	...
16	...	...	220	p220c	220	p210c	p210c	210	200	p200c	p200c	...	...
17	...	...	200	220	200	210	210	200	p190c	p200c	200	...	...
18	...	...	200	230	220	220	210	200	200	200	...	...	...
19	...	...	230	210	220	210	190a	200a	200	...c	...	...	...
20	...	...	230	220	210	200	200	200	200	190	200	...	...
21	...	240	220	220	210	200	200	190	200	210	220	...	...
22	...	...	220	200	220	210	200	200	190h	190	200	...	...
23	...	...	220	210	210	200	230	200	200	200	...	...	...
24	...	...	220	210	210	210	200	210	200	200	200	...	...
25	...	...	210	210	210	210	200	200	200	210	210	...	...
26	...	...	210	210	p210c	210	210	200	200	190	...	...	...
27	...	...	220	210	210	200	200	200	200	200	...	...	...
28	...	...	...	210	210	200	200	210	200	210	210a	...	...
29	...	...	210	220	210	200	210	210	220	210	...	...	...
30	...	...	...	220	200	200	200	200	200	210	...	...	...
31	...	...	220	220	200	210	200a	200a	200	200	...	...	...
*MEAN	...	228	217	211	206	023	202	199	197	198	205	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 342

JANUARY 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1945

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...c	1.2	1.2	1.2	2.0	2.2	2.1	2.2	2.1	2.0	1.8	1.2	1.2	...c	2.8	3.1	...	...	...	...	...	...	...	3.0	2.5	1.7
2	pl.5c	pl.5c	1.2	2.0	2.0	2.0	2.0	2.1	2.3	1.2	1.4	1.8	1.2	p2.0c	2.5	...	...	...	...	...	...	...	...	3.1	2.4	1.9
3	1.2	1.2	1.2	1.8	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.2	1.2	1.8	2.5	3.0	...	...	...	...	...	...	3.4	3.2	2.6	1.7
4	pl.2c	1.2	1.2	pl.9c	2.0	2.0	2.0	2.0	2.0	2.1	1.8	pl.2c	...c	p2.1c	2.9	...	...	...	...	...	...	...	...	p3.0c	...c	...c
5	1.2	1.2	1.2	1.8	2.0	2.0	2.0	2.0	2.0	1.8	1.2	1.2	1.2	1.9	2.6	...	...	...	...	...	...	...	3.5	3.0	2.6	2.1
6	1.0	1.2	1.2	1.8	1.8	1.9	2.0	2.0	2.2	2.0	1.2	1.2	1.2	2.0	2.7	...	...	...	...	...	...	...	3.5	...	2.6	...
7	1.2	1.2	1.2	2.0	2.0	2.0	p2.0c	2.8	2.0	2.1	1.2	1.2	1.4	2.0	2.7	3.1	...	...	...	...	...	...	...	3.2	2.7	1.9
8	1.2	1.2	1.2	1.3	2.0	2.0	p2.0c	p2.0c	2.0	2.0	1.2	1.2	...	1.8	2.6	3.2	...	...	...	...	...	...	...	...	2.3	1.8
9	1.2	1.2	1.2	1.8	1.8	2.0	2.0	2.0	2.0	1.8	1.7	1.2	1.2	1.9	2.7	3.2	...	...	...	...	...	...	3.3	3.2	2.5	1.9
10	1.0	1.2	1.2	1.8	1.9	2.0	2.0	2.0	2.0	1.9	1.2	1.2	1.2	1.8	2.6	3.0	...	...	...	...	...	...	...	...	2.7	1.9
11	1.2	1.2	1.2	1.8	1.8	2.0	2.0	2.0	2.0	q1.8c	q1.2c	1.2	1.2	1.8	2.6	3.0	...	...	...	...	...	...	...c	q3.0c	2.6	1.8
12	1.2	1.2	1.3	pl.8c	2.0	2.0	2.1	2.0	2.1	1.9	1.2	1.2	1.2	1.8	2.5	3.0	...	...	...	...	...	...	3.2	3.0	2.5	1.9
13	...c	...c	1.2	1.3	1.9	2.2	2.0	1.3	2.0	2.0	1.3	1.2	1.2	...c	...c	...c	...	...	3.8	3.7	...	...	...	...	2.6	1.8
14	...b	1.2	2.3	2.8	2.2	3.3	p2.0c	1.5	...c	...c	...c	...c	...c	2.0	2.0	...	...	...	...	...c	...	...	...	...	...	...
15	...b	1.8	1.7	2.0	2.0	2.0	2.1	2.2	2.2	2.3	2.0	1.2	1.2	2.3	2.7	...	...	...	...	...	...	...	...	3.1	2.3	...
16	1.2	1.2	2.2	pl.9	...c	...c	...c	2.2	...c	...c	...c	...c	1.8	1.8	...	...	...	...	...c	...	...	...	...c	...	...c	...
17	1.2	1.3	1.3	2.2	2.2	2.3	...c	...c	...c	...c	1.8	pl.2	1.2	1.9	2.5	...	...	...	...	...	...	...	...	...	...	1.3
18	1.2	1.2	1.2	1.9	2.0	2.2	2.3	2.2	2.0	2.0	1.3	1.2	...	2.0	2.6	3.1	...	...	...	...	...	...	...	2.0	...	1.8
19	1.2	1.2	1.2	2.0	1.9	2.0	2.0	2.0	2.0	1.9	1.2	1.2	...c	1.8	2.7	3.0	...	3.6	...	...	...	...	...	3.1h	...	...
20	1.0	1.2	1.2	1.2	q3.2c	q3.2c	q3.2c	2.0	2.0	2.0	1.9	1.8	1.2	...c	...c	...c	3.3	...	...	...	...	...	...	3.2	2.6	1.9
21	1.2	1.2	1.2	1.8	1.9	2.0	2.0	2.0	2.0	2.0	1.2	1.2	1.2	1.8	2.4	3.0	...	...	...	3.7	3.8	...	...	3.1	2.5	1.8
22	1.2	1.2	pl.2c	1.2	2.0	2.0	2.0	1.9	2.0	1.9	1.2	1.2	1.1	1.8	2.5	p3.0c	3.4	...	...	...	...	...	3.4	3.0	...a	...a
23	1.2	1.2	1.2	1.8	2.0	2.0	2.0	2.0	2.0	1.9	1.2	1.2	1.1	1.8	2.5	3.0	3.4	...	3.6	...	...	...	...	3.4	2.7	1.8
24	1.2	1.2	1.7	1.9	1.9	1.9	1.8	1.9	1.9	1.8	1.8	1.2	1.2	1.7	2.6	3.0	...	...	...	...	...	...	...	...	2.6	...a
25	1.2	1.2	1.2	1.8	1.9	1.8	2.0	2.0	2.0	2.0	1.8	1.2	1.2	1.8	2.6	3.0	...	...	...	...	...	...	...	3.0	2.6	1.8
26	1.2	1.2	1.3	1.8	pl.9c	1.9	1.4	1.9	1.2	1.7	1.2	1.2	1.0	1.6	2.5	3.0	3.4	p3.6c	3.6	3.7	...	...	3.3	3.0	2.7	2.0
27	0.9	1.2	1.2	1.7	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.2	1.2	1.6	2.5	3.0	3.3	3.6	...	...	...	...	...	3.0	...a	...
28	0.9	1.2	1.2	1.7	1.9	1.9	2.0	2.0	1.8	1.8	1.2	1.2	1.2	1.6	2.4	2.8	...	...	...	...	...	3.5	...	...a	2.6	...
29	1.0	1.2	1.2	1.7	1.8	1.8	2.0	1.9	1.9	1.7	1.8	1.8	...	1.7	2.6	3.0	...	...	...	...a	3.6	...	3.3	3.0	2.6	...
30	1.0	1.2	1.2	1.2	1.8	2.0	2.0	2.0	1.9	1.8	1.7	1.2	1.1	1.6	2.4	2.8	...	...	...	...	3.7	3.6	3.4	3.0	2.5	1.9
31	1.2	1.2	1.2	1.8	1.8	1.9	2.0	2.0	2.0	1.9	1.7	1.2	1.2	1.7h	2.5	3.0	...	3.5	...	...	...	...	...	3.0	2.6h	...a
* MEAN	1.2	1.2	1.3	1.6	2.0	2.1	2.0	2.0	2.0	1.9	1.5	1.3	1.2	1.8	2.6	3.0	3.3	3.6	3.7	3.7	3.7	3.6	3.4	3.0	2.6	1.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 343

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1945 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — FEBRUARY 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	4.7	3.5	2.7	2.4	2.0b	...b	4.6	7.4	7.9	8.5	8.4h	7.1	6.8	6.9	7.6	8.0	9.0	9.3	8.7	8.6	7.2f	...f	...f	...f	...
2	...f	...f	p3.5f	...f	...f	p2.0f	4.5	6.7	8.0	9.3	9.3	8.0	8.4	7.9	6.5	6.8	7.3c	7.7	8.3	8.3	9.1	7.8	6.5	6.0	...
3	5.3	3.9f	3.4f	3.1f	2.8f	2.5	4.4	6.4	7.5	8.8	8.5h	7.6	7.1	7.5	8.1	8.5	8.7	9.0	9.4	9.4	...a	...a	...a	...f	...
4	p4.0f	...f	...f	...f	...f	...f	4.0f	6.7	9.1	8.6	8.6	9.2	9.0	8.0c	7.1c	7.5	7.7	8.0	8.1	8.1	...a	5.8f	...f	...a	...
5	...f	p4.5f	...f	...f	...f	...f	3.6c	...c	...c	...c	8.5h	6.5	7.0	7.4	7.9	8.4	8.9	8.9	9.8	9.6	8.5	...f	...f	...f	...
6	...f	...f	...f	p4.0f	3.1f	2.0b	4.5	6.3	8.2	9.1	9.1	8.8	8.9	9.1	9.3	8.6	8.6	8.7	8.4	8.8	8.3	8.5	8.7	8.5	...
7	7.2c	6.5	4.9	3.6	3.1	p2.4c	4.1	p6.0c	p8.0c	9.0	8.9	8.9	8.9h	7.8	7.6	7.5	8.2	8.2	8.8	9.0	8.4	7.6	7.5f	...f	...
8	p6.0f	p6.1f	p5.4f	3.2	1.9	1.9	4.5	6.8	7.7	8.1	8.4	9.8	10.5	10.8	11.3	11.9	11.7	12.0	11.6	10.8	9.9	p9.8f	8.8	7.6	8.2
9	4.6	p3.8c	...c	...c	...c	...c	...c	...c	...c	9.1	9.2	9.4	9.6	10.4	11.0	11.5	11.3	10.7h	10.2h	9.2h	9.1h	7.5	7.8	8.3	...
10	8.2	6.6	3.9h	2.5	2.2	1.7	4.2	6.5	8.0	8.7	8.2	7.8	8.2	8.9	10.0	10.7	10.4	10.9	10.8	9.9	9.3	8.9	8.0	p7.0f	7.6
11	p6.5f	...f	5.1f	4.1f	3.0	1.7	3.8	p6.2c	p8.3c	8.9	9.7	10.3	10.7	11.0	11.1	11.6	11.5	10.5	9.8h	9.1h	9.2h	p7.3h	7.1	...f	...
12	...f	4.2	2.0	1.3b	1.5b	1.5	4.0	7.0	8.6	8.5	9.0	8.1	8.0	8.1	8.7c	8.9	9.0	9.0	9.0	9.0	8.4	...f	...f	...f	...
13	...f	p6.1f	p5.1f	p4.3f	3.3	2.1	4.4	6.9	8.4	8.8	9.4	9.8	10.1	10.0	10.1	10.3	10.1	10.5	11.3	11.3	10.2	8.4	7.4	p6.4c	...
14	p6.0c	p4.8c	p3.6c	...c	...c	...c	4.0c	p6.6c	p8.0c	8.4	p8.4c	8.4	8.7	9.1	p9.4c	9.7	p10.3c	10.9	10.3	10.3	9.6	8.3	7.2	6.5	...
15	5.5	4.6	3.4	2.7	2.5	p2.2c	p4.4c	p5.8c	p7.8c	8.5	8.5h	7.9	7.2	p7.4c	p7.5c	8.1	8.8	9.0	9.5	8.9	...f	...f	...f	7.4f	...
16	...f	p5.6f	p4.9f	p4.0f	3.9f	3.5f	5.0	7.5	8.5	9.5	9.7	9.1	8.8	9.3h	9.3	9.6	9.2	9.9	9.7	10.1	10.3f	11.0	10.0	...c	...
17	...c	...c	...c	p4.9c	4.6	3.6	p4.7c	p7.3c	8.9	9.7	9.2h	8.7c	8.2	8.2	8.4	9.0	9.2	9.0	8.7	8.5	8.8	8.8	8.4	8.5	...
18	8.0	p7.2c	p6.1c	p5.0c	p3.9c	3.6c	4.6c	7.1c	8.6	10.0	p10.8c	10.9	11.5	11.7	p11.7c	p11.8c	11.8	p11.0c	10.3	10.2	11.0	11.1	...c	...c	...
19	...c	...c	...c	...c	...c	...f	...c	...c	p8.8c	9.1	10.5	11.2	11.3	11.4	11.1	10.6	10.2	9.7	9.5	9.3	8.4f	...f	...f	...f	...
20	p6.5f	p4.9f	p5.0f	4.6	3.1	1.6	4.3	7.3	8.4	9.5	10.1	10.4	11.0	11.6	12.0	11.9	12.0	12.1	11.8	11.3	11.0	9.4f	8.5f	...f	...
21	...f	p2.5f	...f	p3.8f	...f	p2.3f	4.5f	6.9	8.4	9.4	10.1	9.5	10.0	10.8	11.8	12.0	11.9	11.5	11.4	10.8	9.2f	...f	...f	...f	...
22	...f	6.8f	3.5	1.9	1.4b	1.6	4.1	6.9	8.4	9.3	10.1	10.4	9.9	11.0	11.8	11.9	p11.2c	p10.6c	p10.9c	10.8	11.5	9.7	8.5	6.9	...
23	5.1	p3.8f	2.5f	2.1f	...b	p1.6b	3.7	p6.4c	p8.2c	8.8	9.4	9.4	9.9	10.7	10.6	10.3	10.5	10.8	10.8	10.1c	9.9c	10.4	10.2	9.9	...
24	8.9	8.1	6.9	5.8	p4.6c	p3.5c	4.2	p6.8c	8.5	9.1	9.5	9.8	10.4	11.4	11.7	11.8	10.5	9.9	9.7	9.2	8.4f	...f	...f	...f	...
25	...f	...f	p4.8c	p4.2c	...c	...c	...c	...c	...c	9.4	10.0	10.3	10.0	10.7	12.6	12.0	11.9	12.0	12.0	11.7	11.2	11.3	9.6	8.5	...
26	...c	...c	...c	...c	p3.7c	p3.4c	3.9	p6.5c	p8.0c	8.6	7.9	7.5	8.0	8.8	9.7	10.5	10.3	10.4	9.9	10.5	10.0	10.0	9.9	11.4	...
27	11.1	8.5	5.9	4.7	3.2	2.8	4.0	7.3	8.4	9.0	8.5	8.3	8.4	8.3	8.2	8.4	9.2	9.9	9.8	9.0	9.6	...f	...f	8.4	...
28	8.4	p6.3c	4.8	3.9	3.3	2.6	4.2	7.2	8.5	9.3	9.1h	7.9	8.0	7.7	7.4	7.9	p8.4c	9.6	9.8	9.5	9.1	8.9	8.7	9.1	7.5
29																									
30																									
31																									
MEDIAN*	6.2	5.2	4.8	3.9	3.1	2.2	4.2	6.8	8.4	9.0	9.2	9.0	8.9	9.1	9.6	10.0	10.2	9.9	9.8	9.4	9.2	8.9	8.5	8.3	7.7

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 344

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1945 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — FEBRUARY 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	250	240	290	280	270	...b	240	230	300	330	360	400	390	380	360	320	320	230	260	280	320	320	360	360	...
2	330	260	240	260	250	250	250	230	300	310	340	360	360	390	380	380	210	240	250	230	260	250	280	320	289
3	330	310	280	260	270	250	250	230	310	340	360	380	400	410	360	350	330	240	260	290	320	330	390	380	318
4	350	330	330	300	280	250	250	220	280	300	340	370	390	380	400	370	330	210	270	270	280	300	310	330	310
5	270	250	270	280	310	320	300	260	p290c	p320c	360	380	400	360	350	330	320	220	260	280	310	300	350	340	310
6	350	350	300	250	240	290	250	230	280	300	350	350	370	350	330	280	230	240	260	240	280	280	250	230	287
7	220	230	230	240	220	p220e	260	p260c	270	330	370	380	390	380	380	350	340	240	260	260	280	290	320	300	292
8	300	290	240	220	250	260	260	240	300	320	330	330	320	340	340	320	300	220	260	300	330	280	280	300	289
9	280	270	...c	...c	...c	...c	...c	...c	...c	320	330	360	350	330	330	340	220	200	250	270	250	260	240	250	...
10	230	210	230	240	230	270	260	240	310	340	360	360	350	350	330	310	200	250	270	280	300	310	320	340	287
11	330	300	260	230	240	280	260	q230c	320	350	330	330	330	330	330	330	210	230	260	270	260	260	230	230	280
12	240	230	250	300	280	300	250	250	290	330	360	370	370	390	q360c	330	330	220	270	280	310	340	360	300	304
13	290	260	270	250	240	260	260	240	300	320	350	340	370	350	350	330	320	230	250	240	240	260	250	260	285
14	250	250	230	...c	...c	...c	240	240	300	330	p350c	370	360	350	p340c	330	p310c	240	270	260	270	310	320	330	...
15	340	300	300	280	240	280	270	240	p300c	360	370	370	380	390	370	320	210	220	280	310	330	330	350	290	310
16	300	270	250	250	260	230	260	240	200	290	340	360	350	330	300	300	200	240	260	240	230	210	230	250	266
17	260	260	280	280	250	240	260	250	220	310	340	360	350	350	350	320	280	200	260	280	250	230	230	220	276
18	240	240	230	240	270	300	260	240	220	300	310	320	330	320	320	300	290	250	260	280	280	270	260	300	276
19	290	270	280	340	300	390	260	240	270	290	310	320	320	330	330	310	290	220	260	280	340	320	320	...a	...
20	350	350	290	220	220	250	250	220	230	300	330	340	320	330	310	290	300	250	260	260	280	300	280	280	283
21	280f	250	240	240	230	230	250	240	310	330	330	330	340	340	320	300	200	230	250	290	250	330	310	260	278
22	250	210	220	240	330	290	250	240	300	320	320	330	340	330	330	320	300	230	250	250	250	260	250	250	278
23	250	240	250	250	...b	250	260	230	p300c	330	320	350	330	330	330	340	290	240	270	250	260	260	260	270	...
24	250	230	230	220	230	240	250	230	300	320	330	330	330	310	310	300	200	230	250	300	300	300	250	250	270
25	310	300	270	290	...c	...c	...c	...c	...c	300	330	330	340	350	310	330	300	220	260	280	270	250	240	240	...
26	280	270	290	270	p260c	250	270	260	240	340	360	370	340	360	310	310	220	240	260	300	310	300	280	300	291
27	240	210	220	230	270	300	250	230	310	320	360	350	340	350	340	200	220	230	280	300	340	300	220	270	278
28	250	250	250	250	240	250	260	240	290	320	350	360	370	350	300	330	330	250	260	280	290	280	290	250	285
29																									
30																									
31																									
MEDIAN*	280	260	250	250	250	260	260	240	300	320	340	360	350	350	330	320	290	230	260	280	280	300	280	280	288

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 345

FEBRUARY 1945 FEBRUARY 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.4	4.5	4.5	4.7	4.5	4.6	4.4h	4.0h	4.2	...	...
2	...	...	4.3	4.4	4.5	4.5	4.6	4.6	4.6	4.5	...	...	...
3	...	...	4.2	4.4	4.5	4.7	4.4	4.6	4.5	4.4	4.4	...	...
4	...	...	4.2	4.4	4.6	4.5	4.6	4.4	4.5	4.3	4.2	...	...
5	...	...	...c	...c	4.5	4.6	4.5	4.5	4.3	4.3	4.2	...	...
6	...	...	4.2	4.2	4.6	4.5	4.6	4.5	4.3	4.0h	...	...	...
7	...	...	...c	4.5	4.7	4.7	4.6	4.5	4.5	4.3	4.2	...	...
8	...	...	4.4	4.5	4.6	4.7	4.6	4.5	4.6	4.3	4.2	...	...
9	...	...	...	4.5	4.5	4.7	4.7	4.6	4.5	4.4h	...	...	...
10	...	...	4.3	4.5	4.7	4.7	4.6	4.6	4.6	4.3	...	...	...
11	...	...	4.3	4.6	4.6	4.6	4.6	4.5	4.7	4.4	...	...	...
12	...	...	4.3	4.6	4.7	4.6	4.7	4.8	p4.6c	4.4	...	...	...
13	...	...	4.5	4.5	4.6	4.7	4.7	4.7	4.8	4.5	4.4	...	...
14	...	...	4.3	4.5	p4.7c	4.7	4.6	4.5	p4.5c	4.4	...c	...	...
15	...	...	...c	4.7	4.8	4.8	4.7	4.7	4.7	4.4	...	...	...
16	...	...	...c	4.4	4.7h	4.7h	4.8	4.6	4.5	4.3	...	...	...
17	...	...	...	4.7	4.6	p4.7c	4.7	4.6	4.6	4.4	4.1	...	...
18	...	...	...	4.6	4.5	4.6	4.7	p4.6c	p4.6c	p4.4c	4.2	...	...
19	...	...	4.5	4.7	4.7	4.7	4.6	4.7	4.5	4.5	4.2	...	...
20	...	...	...	4.5	4.8	4.7	4.8	4.7	4.6	4.3	4.5	...	...
21	...	...	4.4	4.7	4.7	4.8	4.8	4.7	4.6	4.4	...	...	...
22	...	...	4.6	4.6	4.7	4.7	4.8	4.7	4.6	4.7	4.5	...	...
23	...	...	...c	4.6	4.7	4.8	4.8	4.7	4.6	4.7	...	...	...
24	...	...	4.5	4.5	4.6	4.8	4.8	4.7	...f	...f	...	...	...
25	...	...	...c	4.5	4.7	4.7	4.8	4.8	4.5	...a	4.4	...	...
26	...	...	...c	4.6	4.7	4.8	4.7	4.8	4.7	4.5	...	...	...
27	...	...	4.5	4.5	4.7	4.6	4.6	4.6	4.6	...c	...	...	...
28	...	...	4.5	4.6	4.7	4.7	4.7	4.7	4.4	4.5	...	...	...
29													
30													
31													
* MEDIAN	...	...	4.4	4.5	4.7	4.7	4.7	4.6	4.6	4.4	4.2	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	210	230	200	200	200	200	180	220	...	...
2	...	...	200	200	200	200	200	210	190	200	...	...	...
3	...	...	220	220	200	210	200	210	200	200	200	...	...
4	...	...	220	210	210	220	200	200	190	200	200	...	...
5	...	...	220	p210c	210	210	200	190	200	200	200	...	...
6	...	...	220	200	210	210	200	200	200	190	...	...	...
7	...	...	...c	210	210	220	210	200	200	200	230	...	...
8	...	...	230	230	220	220	200	210	200	200	200	...	...
9	...	...	...	240	200	220	220	200	p200c	210	...	...	...
10	...	...	200	220	210	200	200	200	200	p190c	...	...	...
11	...	...	240	210	200	210	200c	190h	200	200	...	...	...
12	...	...	230	220	220	200	210	210	p210c	210	...	...	...
13	...	...	200	220	220	210	p210c	210	210	200	200	...	...
14	...	...	230	220	p210c	210	200	200	p210c	230	...c	...	...
15	...	...	...c	230	210	210	210	210	210	210	...	...	...
16	...	...	...c	210	200	210	200	210	190	200	...	...	...
17	...	...	...	210	210	p210c	200	200	200	200	200	...	...
18	...	...	...	220	220	q210c	210	180	p190c	p200c	200	...	...
19	...	...	220	210	210	210	200	200	200	200	200	...	...
20	...	...	...	210	210	230	210	210	200	200	200	...	...
21	...	...	230	220	210	200	200	190	200	190	...	...	...
22	...	...	230	220	210	200	210	200	200	200	...c	...	...
23	...	...	...c	220	210	220	210	210	200	200	...	...	...
24	...	...	220	220	200	210	220	210	200	180	...	...	...
25	...	...	...c	220	220	210	200	200	210	...a	200	...	...
26	...	...	...c	220	210	210	200	200	200	210	...	...	...
27	...	...	230	220	210	210	210	210	200	...c	...	...	...
28	...	...	220	210	210	200	200	200	200	200	...	...	...
29													
30													
31													
* MEDIAN	...	...	220	220	210	210	200	200	200	200	200	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 346

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1945

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.2	1.2	1.7	1.8	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.2
2	1.2	1.2	1.2	1.7	2.0	1.9	2.0	2.0	2.0	1.8	p1.5c	1.2	1.2
3	1.2	1.2	1.8	1.8	1.8	2.0	1.8	1.9	1.8	1.8	1.2	1.2	1.2
4	1.2	1.2	1.7	2.0	p2.0c	2.0	1.8	1.8	1.8	1.7	1.2	1.2	1.2
5	1.2	...c	...c	...c	...c	1.8	2.0	2.0	p1.9c	1.9	1.7	1.2	1.2
6	1.1	1.2	p1.7c	1.8	2.0	2.0	2.1	2.0	2.0	1.9	1.8	1.2	1.2
7	...c	...c	...c	1.8	2.0	2.0	2.0	2.0	1.8	1.8	1.8	1.7	...
8	1.2	1.2	1.7	1.9	1.8	1.9	2.0	p2.0c	1.9	1.8	1.7	1.2	1.1
9	...c	...c	...c	1.8	2.0	2.0	2.0	1.9	1.7	1.8	1.2	1.2	...
10	1.1	1.5	1.2	2.0	1.8	p1.8c	1.8	1.8	1.8	1.8	1.2	1.2	1.0
11	...c	...c	...c	1.8	1.7	1.9	2.0	p1.9c	1.8	1.9	1.9	1.7	1.2
12	1.1	1.2	1.8	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.7	1.3	1.1
13	1.2	1.2	1.8	1.7	2.0	2.0	2.0	2.0	2.0	1.8	1.7	1.2	1.2
14	...c	...c	...c	1.7	p1.8c	2.0	2.0	1.9	p1.9c	1.9	p1.7c	1.2	1.7
15	...c	...c	...c	1.8	1.8	1.9	2.0	2.2	2.2	1.8	1.3	1.2	1.2
16	1.2	1.3	1.8	2.0	2.0	1.9	2.0	1.9	2.0	2.0	1.9	1.2	1.2
17	...c	...c	1.2	1.7	p1.8c	p1.8c	1.8	p3.0c	1.8	1.8	1.8	1.7	1.2
18	...c	...c	1.7	1.3	1.7	1.8	1.9	2.2	p1.8c	p1.7c	1.3	1.6	1.1
19	...c	...c	1.8	1.9	1.8	1.8	1.8	1.9	1.8	1.8	1.7	1.2	1.2
20	1.2	1.2	1.2	1.7	1.8	1.9	1.9	2.0	2.0	1.9	1.7	1.2	1.2
21	1.2	1.2	1.8	1.9	2.0	2.0	p2.0c	p2.0c	2.0	2.1	1.8	p1.3c	1.1
22	1.2	1.2	1.7	2.0	2.0	2.0	2.1	p2.0c	p2.0c	2.0	p2.0c	2.0	1.8
23	...c	...c	...c	1.8	1.9	2.0	2.0	2.0	2.0	2.0	1.8	1.7	1.2
24	...c	...c	1.2	1.9	2.0	2.0	p2.0c	2.0	1.7	1.2	1.2	1.0	1.0
25	...c	...c	...c	1.8	1.9	1.9	1.9	2.0	2.0	1.8	1.7	1.2	1.2
26	...c	...c	...c	1.8	1.9	p1.9c	1.9	1.9	1.9	1.8	1.7	1.7	1.7
27	1.2	1.1	1.2	1.7	1.8	1.8	1.9	1.9	1.9	1.8	1.7	1.7	...
28	1.1	1.0	1.2	1.8	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.7	1.7
29													
30													
31													
MEDIAN*	1.2	1.2	1.7	1.8	1.9	1.9	2.0	2.0	1.9	1.8	1.7	1.2	1.2

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.6	2.5	3.0	3.4	...	...	...	...	...	3.2	3.2	2.7	1.9
2	1.7	2.5	2.9	...	...	...	...	...	...	...	3.0	2.6	1.8
3	1.6	2.4	3.0	...	...	...	...	...	...	...	3.0	...a	...a
4	1.6	2.5	2.9	...	...	...	...	...	...	...	3.0	2.5	...a
5	...c	...c	...c	...c	...	...	...	...	...	...	3.1	2.4	2.0
6	1.6	2.4	2.9	...	...	...	...	...	...	...	3.0	2.7	1.8
7	...c	...c	...c	3.3	...	...	...	...	...	...	...	2.5	...
8	1.7	2.5	2.9	3.3	...	...	...	...	...	3.3	3.7	2.6	1.8
9	...	...c	...c	3.4	...	...	...	...	...	...	3.0	2.4	1.8
10	1.6	2.5	...	...	...	...	...	...	...	...	...	...c	1.8
11	1.5	2.5	...c	...	...	...	...	...c	...	...	3.0	p2.4c	1.8
12	1.5	2.5	...c	3.4	3.5	...	...	...	...c	...	3.0	2.5	1.8
13	1.6	2.5	3.1	3.3	...	...	...	...	...	...	...	...	1.9
14	...c	...c	...c	...	...	...	...	...	...	...	...	...	...
15	1.6	...c	...	...	...	...	...	...	...	3.3	3.0	...	1.8
16	1.5	2.4	2.9	...	...	...	...	...	...	...	...	2.6	1.7
17	1.6	p2.4c	3.0	...	...	...	...	...	...	...	3.0	2.5	1.7
18	...c	...c	3.1	...	3.7	...	...	...	...	...	...	...	1.8
19	...c	...c	...	3.4	...	...	...	...	...	...	3.0	2.6	1.7
20	1.6	2.4	3.1	...	...	3.9	3.8	...	...	...	...	...	1.8
21	1.2	2.5	...	...	...	...	...	...	...	...	...	2.6	1.7
22	1.6	2.6	3.1	...	3.8	...	...	...	...	...	...c	...	1.8
23	1.7	...c	...c	...	...	...	...	...	...	3.4	...	2.7	1.7
24	...c	...c	...	...	...	...	...	...	...	...	...	...	...a
25	...c	...c	...c	...	...	...	...	...	...	...	3.0	2.4	...
26	...c	...c	...	...	...	...	...	...	...	...	3.0	2.4	1.6
27	1.5	2.4	2.8	...	...	...	...	...	...	...	3.1	2.5	...
28	1.4	2.4	2.8	...	...	...	...	...	...	...	3.0	2.5	...
29													
30													
31													
MEDIAN*	1.6	2.5	2.9	3.4	3.7	3.9	3.8	...	...	3.3	3.0	2.5	1.8

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 347

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1945 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MARCH 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	9.1	5.4	3.5	2.7	2.1	1.3b	4.0	6.8	8.0	p9.0	p7.9c	p6.7c	p5.6c	5.6	p5.7c	p5.9c	p6.0c	p7.1c	p8.3c	9.4	8.3	8.3	8.4f	p7.3c	6.4
2	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.5	8.4	7.9	7.7	p7.9	8.4	p9.5c	p9.1c	p10.0c	10.3	p10.2c	10.1	9.7	8.6	9.2	...
3	8.1	6.4f	5.2f	p4.2c	p3.2c	p2.2c	...c	...c	...c	10.1	8.4h	p6.6c	6.7	p6.5c	p7.4c	8.2	8.7	9.4	10.2	9.8	8.8	8.5	8.5	8.4	...
4	8.4	7.1	6.2	4.8	2.8	1.4f	4.0	6.5	7.5	8.6	9.1	9.2	9.3	9.1	9.0	9.2	10.0	10.4	10.2	9.8	9.6	8.9	8.0	7.1	7.8
5	4.9	2.6	...b	1.3b	...b	...b	3.8	6.6	7.8	8.5	8.4	7.3	7.3	7.8	8.4	9.2	9.3	9.5	9.3	8.2	7.6	6.0f	7.8f	8.2f	...
6	9.3	8.2	7.1	5.5	4.4	p4.6f	3.8	6.8	8.3	9.3	10.0	10.4	9.6h	8.1	8.0	7.8	7.8	7.9	8.4	8.3	7.4	7.0f	p6.6f	7.0f	7.6
7	7.4	6.6	5.5	4.5	3.8	3.4	4.7	7.1	8.0	9.4	9.8	10.5	11.1	11.8	11.7	11.1	10.6	10.6h	9.2	8.4	8.2	8.4	...f	8.9f	...
8	8.4	8.0f	7.8f	...f	5.5f	4.8f	5.4f	7.7	8.2	8.5	9.3	10.2	10.6	10.0	9.8	9.3	8.3	8.4	8.4	8.5	8.6	8.5	8.2	8.0	...
9	8.2	7.3	6.4	5.6	4.1	1.9	3.9	6.9	8.3	9.0	9.3h	8.4	8.4	8.4	8.8	9.1	9.6	9.4	9.1	8.0	p7.6f	...f	...f	...f	...
10	7.9f	8.1f	6.8f	5.8	4.6	4.0	3.7h	7.0	8.5	9.0	8.8	9.2	9.5	9.[illegible]	9.6	9.0	8.2	7.6	7.1	6.6	...f	...f	...f	6.7	...
11	6.0f	4.9f	4.6	4.1	3.9	3.7f	4.6	6.9	8.4	8.7	8.2	8.8	9.1	8.6h	10.2	10.2	10.2	9.4h	8.0	7.3	6.6	6.6f	7.4f	...f	...
12	p6.0f	6.5	7.2	6.5	5.0	4.3	4.7	7.6	8.8	9.1a	9.2	8.6	8.9	9.8	10.7	10.6	9.6h	8.0h	8.1	8.4	8.1	8.3	8.1	7.6	7.9
13	7.5	7.1	7.0	6.4	...f	5.6f	...f	7.9f	9.7	10.5	10.7	11.0h	p11.4	11.9	12.0	12.2	12.0	11.9	11.7h	...f	...f	...f	...f	10.6a	...
14	8.5	6.6	4.8	3.0	2.0	1.5	4.1	7.4	8.7	8.9	8.2	8.3	8.9	9.9	11.9	11.4	11.9	11.9	10.8	p10.7	...f	...f	...a	...a	...
15	...a	...a	...a	...a	...a	...a	3.7h	7.6	10.0	10.7h	10.2h	8.6	9.4	10.0	10.4	10.8	11.3	11.2	p11.4h	10.4	...f	...f	p10.6f	10.0	...
16	8.5	6.5	6.5	5.2	4.9	4.7	4.9	7.4	8.2	9.9	9.0h	7.6	7.5	7.9	6.6	9.7	10.4	10.4	10.2	9.5	8.4f	...f	...f	p8.4f	...
17	8.5f	7.3	4.7	3.4	2.7	2.7	4.2	7.1	8.5	9.4	8.4	6.2	8.1	8.2	8.4	9.3	9.6	10.0	10.2	9.6	8.0	9.0	9.1	9.4	7.7
18	9.0	8.0	5.5	3.4	2.3	1.8	4.0	7.0	8.1	6.8	9.4h	6.5	8.1	7.7	7.8	8.2	8.3	8.4	8.8	8.9	6.4	8.9	9.4	9.8	7.4
19	p8.3c	...c	...c	...c	...c	...c	...c	...c	8.0	...c	...c	...c	p6.2c	p8.4c	p8.0c	p8.5c	p8.0c	p8.4c	...c	...c	...f	...c	...c	...c	...
20	p8.9c	...c	...c	...c	...c	...c	...c	...c	7.9	p9.3c	p9.0c	p[illegible].8c	8.5	8.7	8.6	8.6	8.5	p8.9c	p9.3c	p9.7c	8.6	8.6	8.4	7.9	...
21	7.5	7.6	6.9	4.7	3.1	p2.0c	p4.1c	7.0	7.8	8.9	p8.7c	p7.6c	p8.2c	p8.2c	8.5	9.1	p8.9c	p8.7c	8.5	...c	...c	...f	...f	p5.0f	...
22	...f	...c	...c	...c	...c	...c	...c	...c	...c	8.6h	7.2	7.1	7.4	7.8	8.4	8.5	8.5	8.2	7.7	7.2	6.7f	7.0f	7.8f	8.2f	...
23	p8.3f	p8.2f	6.0f	3.6	2.3f	1.8	3.8	6.9	8.3	8.4	7.5	7.5	7.7	8.4	8.6	8.5	8.4	8.3	7.0	7.2	6.2	5.6f	...f	...f	...
24	...f	...f	p5.2f	p5.2f	3.8f	3.8f	4.3	7.1	7.9	8.7	8.6	8.0h	7.9	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.6	9.0	...
25	8.0	5.6	3.2	2.4	1.8	1.5	3.7	6.7	8.0	8.4	8.3	8.4	8.4	8.8	p10.0c	p10.8c	p10.3c	10.0	9.2	8.3	...f	...f	...f	...f	...
26	p8.5f	p5.5f	4.1f	p2.6f	...b	...b	4.0	7.2	8.5	7.4	8.1	8.5	9.4	p10.9c	p11.2c	p11.3c	p10.2c	8.6	8.5	9.1	8.8	9.1	p10.0c	p9.7c	...
27	...c	...c	...c	...c	3.0	2.0	...c	...c	...c	8.6	7.7	7.8	8.2	9.1	p9.4c	...c	...c	...c	...c	...c	9.9	9.0	10.2	9.6	...
28	p9.5c	p9.1c	8.2	...c	...c	...c	p5.0c	7.4	9.0	10.0	p9.5	p8.9	8.4	9.0	8.7	8.9	9.6	10.4	10.5	9.5	8.5	...f	...f	...f	...
29	p8.0f	8.0f	5.5	4.2	2.6	2.5	4.5	7.0	8.5	9.3	p9.2	9.2	8.8	p10.8c	p11.2	p11.6c	10.8	10.1	10.4	9.6	9.3	9.7	q10.8	10.1	8.4
30	7.8	5.8	4.8	4.3	3.2	2.4	4.1	7.1	8.5	7.4	7.2	7.5	8.1	8.7	9.3	9.7	10.2	10.4	9.4	7.8	7.0f	...f	...f	...f	...
31	p7.5f	p5.0f	...f	3.0f	2.3f	1.7f	4.0	7.4	9.5	9.7	8.3	8.0	8.0	8.4	8.7	8.9	8.6	8.5	8.5	8.6	9.5	...f	9.4	9.0	...
MEDIAN*	8.2	7.0	5.5	4.3	3.2	2.2	4.1	7.1	8.3	9.0	8.8	8.4	8.4	8.8	8.8	9.2	9.6	9.4	9.2	8.8	8.4	8.5	8.5	8.4	7.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 348

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1945 MARCH 1945

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	210	220	240	250	260	310	240	230	300	330	400	380	370	370	360	320	240	240	250	280	310	260	270	270	288
2	...c	...c	...c	...c	...c	...c	...c	...c	...c	320	330	350	340	p360c	330	320	260	240	260	270	260	240	250	240	...
3	300	300	280	280	p280c	270	p250c	240	p290c	320	350	350	390	400	350	300	200	240	250	270	290	290	250	250	291
4	260	260	250	210	230	250	240	230	280	300	330	350	360	370	340	290	320	220	250	260	240	240	230	220	272
5	230	230	...b	270	...b	280b	260	230	280	320	350	380	360	370	310	340	250	240	270	310	330	300	250	230	...
6	250	250	230	240	270	300	260	240	220	310	320	350	340	350	350	340	300	240	260	320	350	250	250	220	284
7	210	210	220	230	250	270	260	230	280	300	310	330	320	330	310	270	200	240	250	250	240	260	220	230	259
8	230	240	220	240	250	260	250	220	230	280	330	330	320	340	330	300	230	240	260	260	250	250	250	240	265
9	230	260	230	220	220	240	250	240	200	320	320	340	340	340	3.0	300	200	250	250	300	290	300	250	240	269
10	230	210	230	230	230	260	260	230	300	320	330	340	330	330	330	360	320	240	260	330	350	330	230	230	284
11	230	230	230	260	240	250	260	240	220	300	310	340	340	320	300	300	310	240	250	310	300	240	290	250	273
12	250	220	220	220	240	220	260	240	220	320	320	300	350	320	300	210	240	240	250	230	240	240	230	230	255
13	230	250	280	300	300	270	260	240	240	250	320	310	320	300	250	290	250	240	250	300	270	260	240	220	268
14	230	230	220	230	250	260	240	240	220	200	320	330	320	310	290	200	200	240	260	290	290	270	260	240	256
15	260	250	250	280	250	200	260	240	230	280	300	320	330	330	300	290	220	240	260	300	270	240	220	230	265
16	220	220	230	250	250	230	240	230	230	300	330	320	350	330	300	270	210	240	260	310	330	320	230	260	269
17	230	210	230	230	240	280	260	240	220	300	310	340	330	350	330	290	200	230	260	300	290	260	230	230	266
18	220	210	220	220	250	250	240	230	220	290	320	330	330	330	310	280	p280c	p270c	270	330	300	270	230	220	268
19	210	250	...c	...c	...c	...c	...c	270	p280c	300	330	350	360	360	340	320	q280c	240	p230c	320	330	p310c	p290c	270	...
20	240	250	...c	...c	...c	...c	...c	q270c	300	310	340	p340c	340	310	320	300	290	260	270	270	250	230	210	220	...
21	220	230	230	250	240	260	p260c	250	280	310	350	350	p350c	p330c	300	320	p300c	p290c	270	350	380	320	240	280	290
22	250	...c	...c	...c	...c	...c	...c	...c	...c	330	330	330	370	330	320	300	210	240	270	300	310	260	270	240	...
23	260	230	260	240	250	260	260	240	290	320	330	350	350	330	330	310	200	240	260	310	340	310	310	250	285
24	240	220	230	240	230	220	260	230	280	320	340	360	330	...c	...c	...c	200	250	270	330	350	240	220	210	...
25	210	210	220	240	260	300	250	240	300	320	340	370	340	340	320	310	200	250	270	340	350	260	250	220	280
26	230	240	240	260	...b	...b	260	250	280	330	350	320	310	320	320	230	240	250	260	250	260	250	240	240	...
27	240	230	240	240	250	280	260	230	...c	310	360	350	330	320	320	p310c	p290c	280	270	270	270	250	250	270	...
28	290	280	260	260	380	420	260	240	240	290	...c	...c	...c	340	320	220	200	250	270	300	320	360	340	270	...
29	230	210	230	230	250	260	250	250	290	330	p330c	330	330	310	p300c	390	230	250	280	320	310	290	260	250	280
30	240	250	260	250	250	270	280	240	310	340	360	350	360	340	310	320	330	280	290	380	370	300	280a	200	298
31	210	210	250	240	250	260	250	240	230	320	330	360	360	350	330	330	210	250	270	300	250	250	240	220	271
MEDIAN*	230	230	230	240	250	260	260	240	280	310	330	340	340	330	320	300	230	240	260	300	300	260	250	240	274

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 349

MARCH 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1945

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.5	4.5	...c	...c	4.3	4.4	...c	...c	...	...	...
2	...	...	...c	4.5	4.5	4.7	4.8	p4.8c	4.5	...c	...	...	...
3	...	...	4.3	4.4	4.5	4.5	4.6	4.6	4.5	4.2	...	...	...
4	...	...	4.4	4.4	4.6	4.7	4.6	4.6	4.5	4.1	4.3	...	...
5	...	...	4.3	4.4	4.5	4.6	4.6	4.6	4.5	4.6	...	...	...
6	...	...	...c	4.5	4.6	4.7	4.6	4.6	4.6	4.3	4.1	...	...
7	...	...	4.3	4.6	4.5	4.6a	4.7a	...a	4.5	...	...	...	...
8	...	...	...	4.5	4.7	4.7	p4.5c	4.5	4.5	4.2	...	...	...
9	...	...	...	4.6	4.7	4.7	4.7	4.5	4.5	4.3	...	...	...
10	...	...	4.4	4.5	4.7	4.7	...c	4.8	4.6	4.7	4.2	...	...
11	...	...	...	4.5	4.6	4.7	4.8	4.8	4.6	4.3	...	...	...
12	...	...	...	4.5	4.7	4.7	4.8	4.8	4.5	...	...	...	...
13	...	...	...	...	4.5	4.7	4.5	4.5	...c	4.3	...	...	...
14	...	...	...	...	4.8	4.8	4.7	4.7	4.4	...	...	...	...
15	...	...	...	4.5	4.7	4.8	4.9	4.7	4.7	4.5	...	...	...
16	...	...	...	4.6	4.6	4.7	4.8	4.7	4.5	4.0	...	...	...
17	...	...	...	4.8	4.6	4.7	4.7	4.8	4.7	4.3	...	...	...
18	...	...	...	4.6	4.6	4.6	4.7	4.6	4.4	4.2	...	...	...
19	...	...	...c	...c	...c	...c	4.7	...c	4.6	4.3	q4.0c	...	...
20	...	...	...c	4.7	...c	...c	4.6	4.5	4.5	4.3	4.1	...	...
21	...	...	...c	4.5	...c	4.7	p4.7c	p4.6c	4.5	4.5	...c	...	...
22	...	...	...c	4.6	4.5	4.6	4.6	4.5	4.5	4.4	...	...	...
23	...	...	4.5	4.4	4.7	4.7	4.6	4.6	4.4	4.5	...	...	...
24	...	...	4.3	4.8	4.6	4.6	4.6	...c	...c	...c	...	...	...
25	...	...	4.5	4.5	4.5	4.7	4.6	4.5	4.5	4.2	...	...	...
26	...	...	...	4.6	4.7	4.8	4.7	4.6	4.7	...	...	...	...
27	...	...	...c	4.7	4.8	4.8	4.7	4.6	p4.5c	...c	...c	...	...
28	...	...	...	4.6	...c	...c	...c	4.7	4.6	...	...	...	...
29	...	...	4.7	...c	...c	4.7	4.8	4.7	...c	4.9	...	...	...
30	...	...	4.5	4.9	4.3	4.7	4.3	4.7	4.6	...c	...	...	...
31	...	...	...	4.6	4.8	4.8	4.8	4.9	4.7	4.8	...	...	...
MEDIAN*	...	...	4.4	4.5	4.6	4.7	4.7	4.6	4.5	4.3	4.1	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	...c	...c	200	210	...c	...c	...	...	...
2	...	...	...c	220	210	210	200	p200	200	...c	...	...	...
3	...	...	230	230	220	200	200	...c	200	200	...	...	...
4	...	...	220	230	210	200	200	200	200	200	210	...	...
5	...	...	210	210	200	210	210	190	200	200	...	...	...
6	...	...	...c	220	210	215	210	200	200	200	200	...	...
7	...	...	220	220	p240a	...a	...a	...a	220	...	...	...	...
8	...	...	...	p200c	...c	220	p200c	200	200	200	...	...	...
9	...	...	...	210	210	210	200	200	[illegible]	200	...	...	...
10	...	...	210	220	200	200	...c	220	200	200	210	...	...
11	...	...	...	220	220	210	200	210	200	210	...	...	...
12	...	...	...	220	200	220	200	210	200	...	...	...	...
13	...	...	...	...	220	200	200	200	...c	200	...	...	...
14	...	...	...	...	200	220	190	210	200	...	...	...	...
15	...	...	...	200	220	220	200	200	200	200	...	...	...
16	...	...	...	220	210	200	190	200	200	200	...	...	...
17	...	...	...	220	210	200	200	210	190	200	...	...	...
18	...	...	...	...c	210	220	200	200	200	200	...	...	...
19	...	...	...c	...c	...c	...c	210	...c	210	210	p200c	...	...
20	...	...	...c	220	...c	...c	220	210	210	200	200	...	...
21	...	...	...c	220	...c	220	p200c	p220c	200	200	...c	...	...
22	...	...	...c	210	220	220	210	200	200	200	...	...	...
23	...	...	230	220	230	200	200	200	210	200	...	...	...
24	...	...	220	230	220	220	220	...c	...c	...c	...	...	...
25	...	...	230	220	230	230	210	210	210	210	...	...	...
26	...	...	...	230	230	220	200	210	...b	...c	...	...	...
27	...	...	...c	220	230	220	220	210	p210c	...c	...c	...	...
28	...	...	...	230	...c	...c	...c	210	220	...	...	...	...
29	...	...	230	210	...c	220	220	210	...c	210	...	...	...
30	...	...	240	230	220	220	200	200	210	...c	...	...	...
31	...	...	...	220	220	210	210	210	200	210	...	...	...
MEDIAN*	...	...	230	220	220	218	200	210	200	200	200	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

MARCH 1945 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — MARCH 1945

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.1	1.7	1.7	1.9	p2.1c	p2.8c	2.9	p2.7c	...c	...c	...c	...c	1.6	1.5	2.4	3.0	...	...	...	...	...	...	...	...	2.8	1.6
2	...c	...c	...c	2.0	2.1	2.8	2.8	p2.8	2.3	2.2	2.1	1.8	1.2	...c	...c	...c	...	...	...	...	...	...	...	...	2.8	...c
3	...c	...c	...c	2.1	2.1	2.8	2.8	2.7	2.7	1.8	1.7	1.7	1.2	...c	...c	...c	...	...	...	...	...	...	3.4	3.0	2.4	1.6
4	1.2	1.2	1.8	1.8a	1.9	2.0	2.0	2.1	2.0	1.9	1.9	1.7	1.2	1.4	2.4	3.1	...a	...	...	...	...	...	...	...	2.4	1.6
5	1.2	1.2	1.8	1.9	2.0	2.1	2.0	2.1	2.0	2.0	1.8	1.7	1.2	1.6	2.4	3.0	...	...	...	...	...	...	...	...	2.5	1.6
6	1.2	1.2	1.8	2.2	2.1	2.2	2.2	2.1	2.1	1.8	1.8	1.8	1.2	1.6	2.5	3.0	...	...	...	...	...	...	...	3.0	2.6	1.9
7	0.9	1.2	1.9	2.2	2.0	2.0	2.1	2.0	2.1	1.9	1.8	1.8	1.2	1.8	2.5	3.0	3.4	...	...	...	...	...	...	2.8	2.6	1.4
8	1.2	1.8	1.8	2.1	p2.1	2.2	2.7	p2.3c	2.0	1.9	2.0	1.2	1.2	1.4	2.4	3.0	...	...	...	...	...	...	...	3.0	2.6	1.5
9	1.2	1.2	2.1	2.8	2.1	2.1	2.1	2.1	2.0	1.9	1.9	1.7	1.2	1.4	2.4	2.9	...	...	...	...	...	...	...	3.0	2.6	1.6
10	1.0	1.2	2.0	2.0	2.1	2.2	p2.3c	q2.5c	2.3	2.1	1.9	1.2	1.2	1.7	2.6	...	...	...	...	...	...	...	...	3.1	2.6	1.5
11	1.2	1.7	2.0	2.0	2.5	2.7	2.0	2.1	2.1	2.0	1.7	1.2	1.2	1.3	2.4	3.0	...	...	...	...	...	...	...	3.0	2.5	1.5
12	1.2	1.2	1.7	2.0	2.0	2.1	2.0	2.1	1.9	1.6	1.7	1.2	1.2	1.4	2.4	3.1	...	...	...	...	...	...	...	2.8h	2.4	1.5
13	1.2	1.2	1.8	2.0	2.0	2.1	2.1	2.0	2.0	2.0	1.6	1.7	...	1.6	...	3.2	...	...	...	...	...	3.5	...	...	2.6	1.6
14	1.2	1.2	1.8	2.0	2.0	2.2	2.1	2.1	p2.1c	2.1	1.8	1.8	1.2	1.4	2.4	2.9	...	...	...	...	...	...	...	3.0	2.6	1.5
15	1.0	1.2	1.8	2.0	2.0	2.2	2.1	2.1	2.1	2.0	1.9	1.2	...	1.4	2.3	3.1	...	...	...	...	...	...	...	3.2	2.2	1.6
16	1.2	1.2	1.8	2.0	2.1	2.1	2.1	2.1	2.1	2.0	1.9	1.2	1.2	1.4	2.3	3.0	...	...	...	...	...	...	3.0	2.9	2.4	1.6
17	1.2	1.2	1.2	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.6	1.2	1.4	2.3	2.9	...	...	...	...	...	...	...	2.6	2.4	1.6
18	1.2	1.8	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	...c	...c	...c	1.3	2.3	2.9	...	...	...	...	...	...	...	...	...	...
19	...c	...c	...c	...c	...c	...c	2.1	p2.1c	2.2	2.3	q2.2c	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...	...	q3.0c	...c	...c
20	...c	...c	...c	...c	...c	...c	2.2	2.2	2.2	1.9	1.8	...c	...c	...c	...c	...c	...	...	...	...	...	...	...	2.6	...	1.6
21	...c	...c	...c	1.9	p2.1c	2.2	p2.2c	p2.2c	2.1	2.1	p1.8c	p1.5c	1.2	...c	...c	...c	...	...	...	...	...	...	...	...	...	1.8
22	...c	...c	...c	1.8	2.0	2.1	2.2	2.1	2.2	1.6	1.8	1.2	1.2	...c	...c	...c	...	...	...	...	...	...	...	3.2	3.4	1.4
23	1.2	1.2	1.8	1.8	2.0	2.0	2.2	2.2	2.0	1.9	1.6	1.2	1.1	1.3	2.4	3.0	...	...	...	...	...	...	...	2.9	2.4	1.3
24	1.2	1.2	1.8	1.9	1.9	2.2	2.1	2.1	2.1	2.1	1.6	...c	...c	1.4	2.5	3.0	...	...	...	...	...	...	...	2.9	2.3	1.7
25	1.2	1.2	1.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.2	...	1.4	2.4	2.9	...	...	...	...	...	...	3.2	2.6	2.4	1.4
26	1.2	1.2	1.6	2.0	2.1	2.0	...b	...b	2.2b	2.2b	1.6	1.2	...	1.3	2.4	3.0	...	...	...	...b	...b	...b	...b	3.0	2.5	1.3
27	...c	...c	...c	1.8	1.9	2.0	2.0	2.0	p2.0c	p2.0c	p1.9c	1.6	...	1.5	2.3	...c	3.3	...	...	...	...	...	...	...a	2.6	...
28	p1.2	1.2	1.2	2.0	...c	...c	...c	2.0	2.1	1.9	1.6	1.6	...	p1.7c	2.3	2.6	...	...	...	...	...	...	...	2.6	2.2	1.7
29	...	1.1	1.9	2.1	p2.1c	2.1	...c	...c	...c	2.0	2.2	...	...	1.9	2.7h	3.1	...	...	...	...	...	...	3.1	3.1	2.5	1.3
30	1.2	1.2	1.8	1.8	2.3	2.3	2.0	2.2	2.2	1.9	2.2	1.3	...	1.4	2.4	3.0	...	...	...	...	...	...	...	3.2	2.6	2.0
31	...	2.5	1.3	1.9	2.0	2.1	2.2	2.2	2.0	1.6	1.7	1.3	...	1.5	2.5	3.1	...	...	...	...	...	...	...	2.8	2.4	1.3
MEDIAN*	1.2	1.2	1.8	2.0	2.1	2.1	2.1	2.1	2.1	2.0	1.8	1.5	1.2	1.4	2.4	3.0	3.4	...	...	...	...	3.5	3.2	3.0	2.5	1.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 351

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1945 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — APRIL 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.0	4.2	2.1	...b	...b	...b	4.5	7.5	8.3	9.4	10.3	10.0	10.1h	8.7	8.2	8.2	8.7	9.4	10.3	10.2	9.8	9.4f	...a	...a	...
2	...a	9.7f	6.7f	6.1f	p5.1f	4.9f	5.6	7.9	9.6	9.9	9.6	8.4	8.4	8.3	7.9	8.5	9.0	9.3	9.4	8.4	...c	...c	...c	...c	...
3	...c	p5.8c	4.7	3.5	2.5	2.8b	4.2b	p7.6c	p9.0c	9.6	10.1	9.0	8.3	8.3	8.6	8.6	8.5	8.5	8.4	7.5	p7.4a	...f	...f	...f	...
4	7.6	6.4	5.4	4.6	3.6	3.0	4.3	7.2	8.4	8.6h	7.0	7.2	7.1	7.2	7.5	7.4	7.5	7.7	8.3	8.4	8.4	9.1	9.0	8.7	7.1
5	7.5	5.2	4.5	4.1	3.7	3.2	4.5	7.3	8.5j	9.2j	9.4h	7.7	7.0	7.6	8.1	8.4	8.7	8.6	9.4	p9.4c	p9.3c	...a	8.4	7.4	...
6	8.5	5.0	4.5	4.3	4.2	3.7	5.1	7.6	8.5	9.6	p10.0c	8.5	p8.8c	p9.2c	9.3	10.0	9.6	9.2	8.5	8.2	7.2	6.9	6.9	7.5	7.7
7	7.0	6.7	5.8	5.4a	5.1a	...f	3.8f	7.1	8.8	10.3	11.1	10.7	10.6	10.2	9.8	9.8	9.8	9.2	8.4	8.1	8.1	8.2	9.0	7.8	...
8	5.0	3.0	2.0	1.3b	1.1b	1.0b	3.9	7.2	8.8	9.6	9.4	8.6	9.9	10.5	10.8	10.9	10.9	10.1	8.5	p6.5f	...a	...f	...a	p8.5f	...
9	8.0f	6.0f	5.5f	4.5f	4.1f	3.2f	4.3	7.5	8.4	8.5	7.7	7.6	8.2	8.5	8.9	9.4	9.8	9.7	p8.7c	7.1	p6.3f	p7.2f	...f	...f	...
10	p6.7f	7.4	5.6	4.2f	2.7	1.7	4.0	7.4	9.1	8.3	7.1	7.2	7.3	8.1	8.8	9.2	9.2	9.0	8.6	7.7	7.1	7.2f	8.0	...f	...
11	...f	p7.4f	6.1	4.5	3.0	3.9	4.0	7.1	8.6	9.5	10.6h	8.4	8.2	8.1	8.0	8.5	9.4	9.6	9.7	9.9	10.2	10.5	9.9	8.7	...
12	8.0	7.2	6.6	6.3	5.2	4.6	5.5	8.5	9.7	9.8h	8.5	8.3	8.3	9.0	9.3	9.0	8.4	8.5	8.5	8.5	7.9	8.6	8.5	8.1	8.0
13	7.3	6.2	4.8	4.3	3.6	3.5	4.8h	7.2	8.3	8.4	8.0	7.8	7.9	8.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	p8.7q	...
14	7.6	5.7	4.2	2.9	2.2	1.7	p3.8c	7.0	8.4	9.4	8.4	7.6	7.8	7.7	8.8	9.9	10.2	10.3	10.0	9.1	9.3	9.6	9.1	8.0	7.4
15	6.9	5.2	4.1	3.6	3.3	...f	p3.9f	6.9	8.4	9.7	9.3	7.7	7.8	7.6	8.0	8.5	9.3	9.7	9.7	9.0	8.9	9.5	8.6	7.7	...
16	7.3	5.7	4.3	2.5	1.8	1.3	3.7	6.7	7.9	8.2	7.5	7.1	p7.4c	7.7	8.2	8.8	9.3	9.3	9.0	8.4	8.4	9.0	8.8	8.0	6.9
17	6.3j	5.1	4.1	3.3	2.9	2.5	4.2	7.0	8.4	9.4	9.2	8.4	8.2	8.5	8.7	9.2	9.3	9.7	10.3	9.3	8.5	...f	9.3f	p9.0f	...
18	8.6f	7.4f	5.3	3.2	2.4	1.9	3.8	6.7	8.8	8.8	7.7	7.2	7.6	8.1	8.8	8.8	8.5	8.2	7.6	6.4j	5.0f	...f	...f	6.2f	...
19	p5.5f	6.6f	p6.3f	p5.6f	p5.1f	p4.8f	5.8f	8.2	9.3	9.9	9.7h	8.3	7.9	7.8	8.1	8.1	8.3	8.2	8.7	8.5	8.5	p8.1c	p7.8c	7.1	7.6
20	7.2f	6.9	5.2	4.2	3.9	3.7	4.7	p8.0c	8.8	9.5	10.1	10.0	9.5	9.5	p9.0c	...c	...c	...c	...c	...c	7.9	7.9	8.5f	p8.0f	...
21	8.1	8.2	7.5	6.6	p5.5f	3.8	4.6	7.4	8.7	8.9	7.7	7.2	7.3	7.8	8.0	8.1	8.2	7.7	7.5	7.2	7.5	8.7	8.5	p7.4c	7.4
22	6.2	5.1	5.0	4.5	4.2	3.5	4.3	7.2	8.3	8.1	7.7	7.6	7.6	8.0	8.2	8.5	8.6	8.7	9.0	8.5	8.5	9.3	7.4	7.1	7.1
23	8.8	p8.1f	6.7j	5.5j	p5.1c	p3.2c	p4.2c	7.0	8.4	8.6	7.8	p7.1c	7.5	7.8	8.3	9.5	9.6	10.0	9.5	...c	...c	...c	...c	...c	...
24	...c	...c	p4.5c	3.6	3.3	p2.8c	3.5h	p6.5c	p7.5c	6.9	7.1	7.3	7.3	p8.0c	9.2	10.0	9.7	9.9	9.8	9.2	9.5	9.6	8.7	8.5	...
25	10.2	8.1	4.7	3.8	p2.3c	2.0	4.2	p7.2c	p9.3c	8.6	8.4	8.7	p8.5c	8.6	9.0	9.6	9.3	9.6	9.5	8.6	9.0	9.8	9.4	8.9	7.8
26	7.9	6.3	4.7	...c	...c	...c	...c	...c	p9.2c	9.9	8.7	8.3	8.5	9.3	10.2	10.3	10.0	10.0	9.6	8.6	8.8	9.6	p9.6c	7.6	...
27	6.5	4.8	3.1	2.2	1.6	1.3	3.8	7.2	8.4	8.2	7.5	7.2	6.9	7.4	8.3	8.7	9.3	9.8	9.5	8.4	8.3	8.5	8.4	7.5	6.8
28	6.6	5.5	4.4	2.9	1.8	1.4	3.9	7.3	8.8	8.5	7.5	7.2	7.3	7.4	p8.0c	8.8	9.4	10.0	10.2	9.1	9.2	9.4	8.5	7.7	7.1
29	7.8	5.6	3.7	2.9	1.9j	...b	3.8	7.3	9.1j	9.2	7.5	7.6	7.5	7.8	8.2	9.0	9.4	9.7	9.5	8.9	8.7	9.0	9.2	7.8	...
30	p9.0f	7.0	4.6	2.6	2.1	1.8	4.0	7.1	8.9	9.6	7.9	7.2	7.4	7.4	8.2	8.7	9.9	9.9	9.4	8.4	7.9	8.6	8.8	7.9	7.3
31																									
MEDIAN*	7.4	6.3	4.7	4.2	3.3	3.0	4.2	7.2	8.6	9.3	8.4	7.7	7.8	8.0	8.3	8.8	9.3	9.5	9.2	8.5	8.4	9.0	8.6	8.0	7.4

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 352

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1945 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — APRIL 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	210	220	260	...b	...b	...b	260	250	240	300	320	320	360	330	310	330	230	250	280a	280	260	300	280	260	...
2	240	230	240	250	270	270	270	240	290	310	340	340	340	330	300	310	210	260	290	360a	280	290	240	230	280
3	230	230	240	240	240	280	250	240	230	290	300	330	340	360	330	320	200	260	300	330	270a	240	250	240	272
4	230a	250a	240	240	240	230	250	250	290	350	380	400	420	380	340	210	210	260	280	300	270	240	220	220	279
5	210	240	250	240	260	240	250	240	270	320	340	350	380	360	320	210	230	250	310	300	310	240	230	230	274
6	230	230	270	200	250	260	260	240	240	310	320	340	330	330	320	220	230	260	280	300	310	280	230	220	269
7	220	230	250	290	310	300	270	250	290	290	320	290h	320	330	290	310	200	260	280	290	290	240	210	220	273
8	220	230	240	290	300	330	270	240	280	300	330	310	330	310	300	220	220	240	290	370	320	270	240	210	278
9	210	210	240	250	240	240	270	230	230	340	320	380	360	320	330	210	210	250	290	340	300	230a	250	220	270
10	220	210	240	220	240	260	260	240	300	320	340	340	340	350	320	310	210	260	280	340	320	300	240	300	282
11	240	220	230	240	230	250	250	240	230	320	310	300	330	330	320	320	230	250	270	260	280	250	230	240	265
12	270	230	260	250	250	250	250	230	270	310	330	340	330	340	300	200	210	250	270	300	300	220	210	230	267
13	230	220	230	270	270	270	270	250	280	310	340	340	350	320	...c	...c	...c	...c	...c	...c	...c	...c	...c	p220c	...
14	220	230	240	240	250	270	250	240	240	p300c	320	320	360	320	300	300	290	250	270	300	270	230	230	220	269
15	220	230	290	280	320	310	260	230	280	300	300	330	360	340	310	310	230	260	270	290	270	250	230	230	279
16	220	220	230	250	250	270	270	240	310	320	340	350	p360c	330	310	310	230	250	280	320a	260a	240	220	220	275
17	220	220	240	240	240	250	250	230	290	310	320	340	360	350	320	300	230	250	260	300	300	250f	230	220	272
18	220	200	220	240	250	270	260	240	290	300	330	340	370	350	330	300	210	250	300	360	390	320	280	230	285
19	240	230	230	210a	290	270a	260	230	230	320	310	340	350	340	330	200	220	270	270	270	280	p280c	p230c	230	268
20	230	220	240	240	270	300	270	p240c	220	310	300	320	340	360	p330	p300c	p240c	250	260	300	310	300	250	240	277
21	250	250	250	240	240	250	260	230	280	310	320	350	380	360	330	320	230	260	310a	340	300	290	230	230	284
22	220	240	230	250	240	230	260	230	230	350	350	350	350	330	330	330	220	250	280	270	260	240	230	240	271
23	220	230	230	240	240	240	260	240	p230c	320	350	p340c	370	330	340	300	230	270	300	320	280	270	240	240	276
24	240	230	250	260	250	280	270	260	230	310	340	360	340	320	330	290	240	270	280	300	280	250	230	230	277
25	220	220	240	230	250	280	270	p280c	p300c	310	330	320	370	330	340	310	230	250	270	320	260	250	230	230	277
26	230	230	220	q240c	q240c	q280c	q270c	q240c	p300c	300	300	310	350	340	310	270	240	260	280	340	300	240	220	220	272
27	220	220	240	250	260	290	260	240	300	320	360	380	390	370	320	220	p260c	270	300	330	300	260	230	220	284
28	230	220	230	230	260	270	260	260	300	330	360	380	380	360	p310c	210	240	270	290	290	260	230	230	230	277
29	230	230	240	250	250	...b	270	240	300	330	350	370	380	350	360	340	210	270	300	310	280	250	230	240	...
30	220	220	230	250	270	270	230	240	300	320	340	370	410	340	310	230	240	260	310	360	320	260	230	230	284
31																									
MEDIAN*	220	230	240	240	250	270	260	240	280	310	330	340	360	340	320	300	230	260	280	300	280	250	230	230	275

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 353

APRIL 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1945

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	[illegible]	4.8	4.7	4.8	4.8	4.4	4.5	...	...	...
2	...	...	4.6	4.3	4.7	4.3	4.3	4.7	4.5	4.5	...	...	...
3	...	...	...	[illegible]	4.7	4.8	4.8	4.9	4.6	4.6	...	...	...
4	...	...	4.8	4.3	4.8	4.9	4.3	4.8	4.6	...	...	...	...
5	...	...	4.5	4.6	4.7	4.8	4.9	4.7	4.5	...	...	...	...
6	...	...	...	4.7	4.7	4.7	4.7	4.7	4.5	...	...	...	...
7	...	...	4.4	4.6	4.6	4.6	4.7	4.7	4.4	4.5	...	...	...
8	...	...	4.3	4.3	4.9	4.7	4.8	4.6	4.6	...	...	...	...
9	...	...	...	4.7	4.6	4.9	4.7	4.6	4.9	...	...	...	...
10	...	...	4.6	4.5	4.6	4.6	4.6	4.6	4.5	4.5	...	...	...
11	...	...	...	4.7	4.5	4.6	4.7	4.6	4.4	4.5	...	...	...
12	...	...	4.3	4.8	4.7	4.8	4.7	4.7	4.5	...	...	...	...
13	...	...	4.1	4.6	4.7	4.6	4.7	4.5	...c	...c	...	...	...
14	...	...	...	...c	q4.7c	p4.7c	4.7	4.6	4.4	4.4	...	...	...
15	...	...	4.2	4.4	4.5	4.7	4.7	4.6	4.0	4.5	...	...	...
16	...	...	4.7	4.5	4.6	4.7	p4.7c	4.6	4.5	4.5	...	...	...
17	...	...	4.4	4.5	4.7	4.7	4.7	4.5	4.5	...	...	...	...
18	...	...	4.4	4.6	4.7	4.7	4.7	4.7	4.5	4.2	...	...	...
19	...	...	...	4.6	4.7	4.7	4.7	4.6	4.5	...	...	...	...
20	...	...	...	4.7	4.7	4.7	4.7	4.7	p4.5c	...c	...	...	...
21	...	...	4.4	4.7	4.6	4.7	4.8	4.7	4.5	4.5	...	...	...
22	...	...	...	4.7	4.7	4.8	4.6	4.6	4.6	4.6	...	...	...
23	...	...	...c	4.6	4.6	p4.6c	4.6	4.5	4.3	4.5	...	...	...
24	...	...	...c	4.5	4.7	4.8	4.7	4.5	4.5	4.3	...	...	...
25	...	...	p4.5c	4.5	4.5	4.7	4.3	4.7	4.7	4.6	...	...	...
26	...	...	...c	4.3	4.6	4.7	4.8	4.5	4.6	4.2	...	...	...
27	...	...	4.5	4.7	4.3	4.9	4.8	4.8	4.6	...	...	...	...
28	...	...	4.6	4.7	4.8	4.8	4.8	4.7	...c	...	...	...	...
29	...	...	4.4	4.6	4.8	4.8	4.9	4.8	5.1	...	...	...	...
30	...	...	4.5	4.3	4.7	4.8	4.9	4.6	4.6	...	...	...	...
31													
* MEDIAN	...	...	4.4	4.7	4.7	4.7	4.7	4.6	4.5	4.5	...	...	...

MINIMUM VIRTUAL HEIGHT OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	220	210	210	220	210	210	230	...	...	...
2	...	...	230	230	230	210	220	210	210	210	...	...	...
3	...	...	...	220	220	210	210	220	200	200	...	...	...
4	...	...	230	220	230	220	220	200	210	...	...	...	...
5	...	...	220	210	220	210	220	210	200	...	...	...	...
6	...	...	...	220	230	210	220	200	210	...	...	...	...
7	...	...	230	230	230	220	210	220	200	210	...	...	...
8	...	...	230	220	230	220	210	210	210	...	...	...	...
9	...	...	...	220	210	200	210	210	200	...	...	...	...
10	...	...	230	230	220	200	200	210	210	230	...	...	...
11	...	...	...	230	220	220	200	p210c	210	220	...	...	...
12	...	...	230	230	220	230	220	220	200	...	...	...	...
13	...	...	230	220	220	220	220	200	...c	...c	...	...	...
14	...	...	...	...c	...c	...c	210	200	200	200	...	...	...
15	...	...	200	230	210	230	200	200	210	230	...	...	...
16	...	...	220	210	210	210	p210c	210	220	210	...	...	...
17	...	...	210	210	200	220	210	210	200	...	...	...	...
18	...	...	230	220	210	210	210	210	220	210	...	...	...
19	...	...	...	220	210	220	220	210	210	...	...	...	...
20	...	...	...	210	220	200	210	220	p200c	...c	...	...	...
21	...	...	230	210	210	210	200	210	210	200	...	...	...
22	...	...	...	220	210	210	200	200	200	200	...	...	...
23	...	...	...c	210	210	p200c	210	200	180	200	...	...	...
24	...	...	...c	210	210	210	200	p210c	210	220	...	...	...
25	...	...	p230c	220	230	210	210	200	200	...c	...	...	...
26	...	...	...c	210	200	200	220	220	210	220	...	...	...
27	...	...	...c	230	220	220	220	220	220	...	...	...	...
28	...	...	230	220	220	210	220	210	...c	...	...	...	...
29	...	...	200	210	220	210	210	210	200	230	...	...	...
30	...	...	230	220	220	230	220	210	220	...	...	...	...
31													
* MEDIAN	...	...	220	220	220	210	210	210	210	210	...	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 354

APRIL 1945 — APRIL 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	1.3	1.8	2.2	1.8	2.0	2.3	2.2	1.9	1.8	1.8	1.3	1.2	1.5	2.4	...	...	3.5	...	...	...	...	...	...	2.4	...
2	1.0	1.2	1.2	2.0	2.0	2.0	2.3	2.2	3.0	2.3	1.9	1.7	1.2	1.4	2.4	2.9	...	...	...	...	...	...	...	...	2.4	...
3	...c	...c	...c	1.8	2.1	2.2	2.2	2.2	2.0	2.1	1.8	1.2	1.2	1.6	p2.4c	3.2	...	...	...	...	...	3.5	...	...	2.4	...
4	1.2	1.3	1.8	1.9	2.1	2.2	2.2	2.0	2.0	1.9	1.8	1.7	1.0	1.4	2.5	3.0	3.4	...	...	...	...	...	...	1.8	2.4	...
5	...c	1.7	1.7	1.8	2.0	2.0	2.0	1.9	1.8	1.7	1.8	1.7	1.0	1.4	2.4	2.9	...	...	...	...	...	...	...	2.7	2.2	...
6	0.8	1.7	1.8	1.7	2.7	2.0	2.0	1.9	1.8	1.8	1.7	1.7	0.8	1.4	2.4	3.0	...	...	...	...	...	...	...	...	2.2	1.1
7	0.9	1.0	1.7	1.7	1.8	1.8	2.0	2.0	1.8	1.7	1.5	1.2	0.9	1.4	2.7	2.8	...	...	...	...	...	...	3.0	2.8	2.2	1.2
8	0.7	0.9	1.7	1.8	1.9	2.0	2.0	2.0	1.9	1.8	1.7	1.7	1.0	...	2.4	2.8	...	...	...	...	...	...	3.0	2.7	2.1	...
9	1.0	1.2	1.7	1.7	1.8	1.9	2.0	2.0	1.8	1.7	1.7	1.7	1.0	1.5	2.4	2.9	...	...	...	...	...	...	...	2.7	2.2	1.1
10	...	1.2	1.7	1.7	1.9	1.9	2.0	2.0	2.0	1.7	1.7	1.2	0.9	1.4	2.3	2.9	...	...	...	...	...	...	...	2.7	2.2	1.0
11	1.0	1.0	1.7	1.7	1.8	1.9	1.9	1.9	1.9	1.8	1.7	1.2	1.0	1.4	2.3	2.9	...	...	...	...	...	...	...	2.8	2.5	...
12	0.9	1.0	1.7	1.8	1.9	2.0	2.0	2.0	1.8	1.7	1.7	1.0	...	1.3	2.3	2.9	...	...	...	...	...	...	3.0	2.6	2.1	1.0
13	0.9	1.0	1.2	1.7	1.8	1.9	2.0	2.0	...c	...c	...c	...c	...c	1.3	2.3	2.7	...	...	...	...	...	...	...c	...c	...c	...c
14	...	1.2	1.7	...c	...c	...c	2.0	2.0	1.8	1.8	1.7	1.0	1.0	1.4	2.3	2.5	...	...	...	...	...	...	...	...	2.2	1.0
15	0.8	1.7	1.7	1.8	1.8	1.9	2.0	2.0	1.8	1.8	1.8	1.7	...	1.4	2.2	2.7	...	...	...	...	...	3.0	...	2.8	2.9	...
16	1.0	1.7	1.7	1.7	1.9	2.0	p2.0c	2.0	2.0	2.0	1.7	1.2	...	1.2	2.3	2.8	3.3	...	...	...	...	...	...	3.0	2.3	...
17	1.0	1.2	1.2	1.8	1.8	1.8	2.0	2.0	2.0	1.8	1.7	1.3	1.0	1.4	2.3	2.2	...	...	...	...	3.5	...	...	...	2.1	...
18	1.3	1.2	1.7	1.8	1.0	2.1	2.2	2.2	1.9	2.0	1.7	1.2	...	1.3	2.4	2.9	3.3	3.5	...	...	...	...	3.1	2.7	2.1	1.0
19	0.7	1.0	1.3	2.2	1.0	2.2	2.2	2.2	2.0	1.8	1.3	1.2	1.1	1.3	2.3	3.0	...	...	...	...	...	...	...	2.8	2.1	1.3
20	1.0	p1.3c	1.2	2.2	1.8	1.8	2.2	2.2	p2.0c	...	...	...c	...	1.0	p2.7c	3.0	...	...	...	...	...	...	...c	...c	...c	1.1
21	1.2	1.3	1.3	2.2	1.8	2.0	2.2	2.2	2.0	1.7	1.3	1.1	1.0	1.4	2.4	2.7	3.2	...	3.7	...	...	3.5	3.0	2.9	2.2	...
22	0.6	1.2	1.2	1.3	1.8	2.0	2.0	2.0	2.0	1.7	1.3	1.2	1.0	1.3	2.3	3.0	3.3	...	...	...	...	3.5	3.1	2.9	2.2	...
23	...	1.4	p1.7c	1.8	1.9	p1.9c	2.0	2.0	2.0	1.8	1.8	1.2	...	1.5	2.4	...c	...	...	p3.7c	...	...	3.5	...	...	...	...
24	...c	...c	...c	2.2	2.3	2.3	2.2	p2.2c	2.3	2.3	1.8	1.7	1.7	...c	...c	...c	3.4	...	...	...	...	...	...	3.0	2.3	...
25	...	...c	p1.7c	2.3	2.0	3.0	2.2	2.2	2.0	p1.8c	1.7	1.2	1.1	p1.4c	p2.4c	p3.3c	...	...	...	...	...	...	...	2.7	2.1	...
26	...c	...c	...c	2.0	2.0	2.2	2.2	2.3	p3.0c	2.2	1.9	1.8	...	...c	...c	...c	...	...	...	...	...	...	...	3.0	2.2	1.2
27	1.2	1.3	p1.7c	2.2	p3.0c	2.3	p2.2c	2.2	2.3	1.8	p1.8c	1.7	1.0	1.4	2.5	...c	...	...	...	...	...	...	...	...	...a	1.2
28	1.2	p1.3c	1.3	1.8	2.0	2.0	2.0	2.2	p2.0c	1.8	1.9	1.9	...	1.3	...c	3.0	...	...	...	...	...	...	...	3.0	2.4	1.0
29	...	1.3	1.3	1.8	2.2	2.0	2.0	2.1	1.9	2.0	1.8	1.3	1.0	...	2.3	3.0	...	...	...	...	...	...	...	...	...a	1.0
30	1.2	1.2	1.2	1.8	1.9	2.0	2.1	2.0	2.0	1.8	1.8	1.2	...	1.5	2.4	3.0	...	3.6	...	...	...	...	...	2.7	...	1.1
31																										
MEDIAN*	1.0	1.2	1.7	1.8	1.9	2.0	2.0	2.0	2.0	1.8	1.7	1.2	1.0	1.4	2.4	2.9	3.3	3.5	3.7	...	3.5	3.5	3.0	2.8	2.2	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 355

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.8	5.6f	4.1	2.6	2.1	1.8	4.1	7.2	8.4	9.3	9.6	8.5	7.9	8.2	9.1	9.3	9.9	p10.0c	9.7	8.7	8.6	9.2	8.5j	p7.4f	7.4
2	6.8	6.7	...f	...f	p4.5f	3.6	4.7	7.3	8.6	9.6	9.4	8.5	8.4	8.3	8.8	9.2	9.6	p9.4c	8.7	7.7	7.8	8.0f	...f	6.7	...
3	6.6	5.4	4.4	3.2	2.4	1.8	3.8	6.9	8.5	9.1	8.8	8.1	7.5	8.0	8.3	8.6	8.6	8.3	7.8	7.2	7.9	8.4	7.6	p6.7f	6.8
4	6.3	4.8	4.2	4.0	3.8	3.4	4.2	6.7	8.8	8.4	8.1	7.8	7.8	7.4	7.8	p7.7c	p7.9c	8.2	8.1	7.5	7.5	7.8	p7.7c	7.3	6.8
5	6.1	p5.9c	5.0	4.6	3.6	p3.3c	3.4	6.5	8.2	9.0	8.5	8.4	9.0	8.4	7.8	7.9	7.6	7.2	7.3	7.1	7.6	8.1	7.4	6.0	6.8
6	4.7	4.3	4.2	4.1	3.6	3.3	4.2	5.4	8.0	p8.8c	8.7	8.3	8.5	8.3	8.7	8.4	7.6	7.3	7.4	7.3	8.2	8.6	6.9	5.6	6.7
7	5.0	5.0	5.2	5.0	4.6	3.6	4.3	6.7	8.0	8.5	7.6	7.5	7.4	7.7	8.1	8.3	8.2	7.6	7.2	7.1	6.9	p7.5c	6.7	p6.3c	6.7
8	p6.0c	p5.6c	p5.6c	4.8	4.1	p3.4c	3.1	p6.7c	7.6	p8.8c	p8.6c	8.6	8.8	8.0	[illegible]	8.5	8.3	7.3	6.5	5.7	5.2	5.3	...f	5.9	...
9	5.3	4.6	4.1	3.3	2.9	2.9	3.2	5.8	7.5	8.5	8.8	8.5	8.4	8.1h	7.5	8.0	8.4	8.4	7.9	7.4	8.4	5.9	7.1	5.3a	6.5
10	p4.7c	p4.0c	p3.4c	3.0	2.5	2.2	p3.5c	p5.6c	p7.3c	p6.5c	p6.4c	p6.1c	7.1	7.2	...c	...c	...c	8.2	8.2	8.4	8.4	8.0	7.2	6.0	...
11	6.5	4.2	p2.9f	...f	...f	p2.1f	3.7f	6.5	8.7	p9.1c	p9.6c	10.0	7.0	8.0	8.2	7.8	7.6	8.0	8.0	7.8	7.8	p7.8c	6.2	6.3	...
12	6.9	6.4	4.7	3.6	3.3	2.8	3.6h	5.8	7.1	7.5	6.8	6.6	7.0	7.3	7.8	7.9	7.8	8.0	8.2	8.1	8.0	7.8	6.9	7.0	6.5
13	6.3	5.5	4.1	2.5	2.3f	...f	3.0	6.0	7.3	7.6	6.6	6.5	6.5	6.3	6.6	7.3	7.9	7.6	7.6	7.3	7.2	7.9	7.3	5.8	...
14	5.2	5.5	5.0	3.5	2.8	2.1	3.7	p5.8c	7.9	8.2	7.6	p7.2c	6.8	6.7	7.0	p7.1c	7.1	7.0	6.9	6.7	7.1	...c	...c	...c	...
15	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.7	p7.4c	[illegible]	...c	...c	...c	p6.5c	6.6	6.9	7.3	6.9	6.9	7.2	5.8	5.2	...
16	5.5	5.0	3.7	3.1	2.2	1.7	3.2	6.4	p8.2c	p8.1c	8.0	8.1	7.0	6.7	p6.7c	p6.8c	p6.8c	p7.3c	7.8	7.1	6.6	7.2	5.5	5.0	6.0
17	4.8	4.1	2.7	2.1	1.6	1.7	2.9	5.4	6.6	7.3	7.7	7.5	7.4	7.7	7.6	8.0	p8.2c	7.9	8.0	7.7	7.4	8.0	7.1	6.0	6.1
18	4.6	4.3	3.1	2.5	2.4f	...f	3.2	6.2	8.0	8.2	p7.6c	p7.4c	p7.2c	7.1	7.7	p7.6c	7.6	7.2	5.8	6.0	6.8	7.0	5.5	5.2	...
19	5.2	4.9	4.8	4.2	3.5	3.3	4.2	6.6	8.1	8.2	7.5	7.3	7.1	8.0	7.8	8.2	7.6	7.2	7.3	7.2	p7.3c	p7.6c	6.9	5.6	6.5
20	5.4	4.8	5.0	...f	...f	...f	3.1f	6.0	7.7	8.4	p8.1c	p7.9c	7.6	8.0	8.3	7.9	8.1	8.5	8.1	7.8	7.7	7.7	5.9	5.3f	...
21	5.6	5.7	5.6	4.6	3.1	2.3	3.0	p5.9c	p6.6c	7.3	p7.2c	7.1	7.7	7.8	p7.8c	p7.7	...c	...c	...c	...c	...c	...c	...c	...c	...
22	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	p8.8j	p8.4c	...c	...c	...c	...c	8.4	8.6	8.0	7.9	7.2	p7.0c	6.9f	p7.5f	...
23	6.5	5.6	5.0	3.7	3.8f	3.8	2.9	5.4	7.0	p7.5c	7.8	p7.8c	7.8	7.7	7.5	7.6	7.8	7.4	p7.3c	7.2	p7.3c	p7.1c	6.6	6.0	6.4
24	6.2	6.2	5.5	4.6	3.6	p3.0f	2.9	5.8	6.8	p7.3c	p7.8c	p7.9c	8.0	8.0	p7.8c	p7.7c	7.5	7.3j	7.4j	7.2	7.6	7.9	p7.6c	...c	...
25	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.4	p8.1c	p7.7c	7.4	7.1	p6.7c	6.3	7.6	7.8	7.6	7.3	p7.1c	7.0	6.5	6.0	...
26	5.8	5.2	4.6	4.0	3.6	3.1	3.3	6.3	7.7	8.2	p8.4c	7.7	7.6	7.0	...c	...c	...c	p7.2c	7.1	6.0	5.6	6.7	6.5	6.2	...
27	6.2	4.3	3.6	2.8	2.5	2.0	3.3	5.7	7.2	8.1	p8.3c	p7.8c	p7.3c	p6.6c	p6.7c	8.5	8.3	8.2	8.0	6.6	6.4	7.1	p7.2c	6.5	6.2
28	6.4	6.8	6.2	5.1	4.1	2.5	3.5	6.1	7.7	8.0	7.1	6.9	6.6	7.8	7.8	p7.4c	p7.7c	7.8	8.1	p6.9c	p7.1c	...f	5.8	6.7	...
29	6.0	5.5	5.0	3.5	3.2	2.7	p3.6c	6.4	7.8	8.2	8.2	7.4	7.5	p7.8c	8.1	8.4	8.4	p8.4c	8.5	8.3	p7.7c	7.4j	p6.9c	5.8	6.7
30	5.4	4.2	3.3	2.6	2.4	2.2	3.3	5.9	6.7	6.4	p6.6c	p6.3c	p6.5c	p6.6c	6.7	p7.5c	7.4	7.1	7.2	6.2	6.3	7.1	6.9	5.1	5.7
31	4.1	4.3	3.6	3.5	2.9f	...f	3.0	6.0	7.4	8.0	8.5h	7.6	7.2	7.2	7.6	8.2	8.0	8.4	7.0	6.6	6.7	7.8	6.4	5.5	...
MEDIAN*	5.9	5.1	4.4	3.5	3.2	2.8	3.4	6.0	7.7	8.2	8.1	7.7	7.4	7.7	7.8	7.9	7.8	7.8	7.7	7.2	7.3	7.6	6.9	6.0	6.5

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 356

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	220	230	260	260	270	260	240	230	320	330	350	350	370	320	310	240	260	290	300	300	240	230	240	277
2	240	250	270	270	260	240	260	240	300	300	320	340	320	340	310	300	290	270	290	340	310	290	240	230	284
3	230	230	220	240	250	260	270	240	240	300	310	330	340	330	300	310	280	260	310	320	280	230	230	230	272
4	220	240	240	260	260	250	280	250	230	290	330	340	350	340	360	p300c	p210c	260	290	320	310	260	240	220	277
5	210	220	220	240	240	300	270	240	300	300	310	330	360	340	300	380	240	250	280	270	250	230	230	220	272
6	220	220	220	220	230	250	270	240	220	p320	310	330	360	350	340	290	230	260	280	270	260	240	220	230	266
7	240	240	240	240	230	240	270	240	220	320	340	350	370	350	350	320	230	260	300	310	280	q260c	230	230	278
8	220	230	210	240	240	270	270	240	300	300	p320c	340	330	300	350	330	230	260	300	340	350	270	230	220	279
9	220	230	220	230	270	290	270	240	290	330	330	370	350	330	320	p300c	200	260	270	320	...a	240	210	220	...
10	230	220	250	230	270	270	...c	...c	...c	...c	...c	p360c	380	370	...c	...c	...c	270	260	250a	270	230	240	220	...
11	200	220	300	300	310	250	260	230	220	p320c	p330c	340	280	230	320	250	230	250	240	250	240	230	240	230	261
12	220	220	240	260	250	230	260	240	310	320	320	350	370	370	340	330	230	260	250	250	260	250	230	220	274
13	220	220	220	250	290	320	210	250	320	330	340	390	410	410	360	300	220	260a	270	280	280	250	220	240	288
14	220	230	230	240	250	240	260	p280c	290	330	320	p360c	400	380	340	p300c	220	250	270	270	240	220	230	230	275
15	230	220	240	270	310	300	270	p280c	p300c	320	p350c	380	...c	...c	...c	210	230	240	270	250a	240a	220	230	220	...
16	230a	230	220	230	250	280	250	p270c	290	p320c	340	360	400	400	...c	...c	...c	...c	270a	280	280	230	230	220	...
17	220	230	240	250	280	340	270	240	290	320	340	360	360	370	330	320	p280c	270	290	300	280a	250	240	220	287
18	230	220	240	270	320	320	270	240	310	340	p360c	380	350	350	350	p280c	220	250	290	260	240	220	240	230	282
19	230	220	240	250	280	300	270	230	280	310	350	360	360	390	320	340	220	250	280	250	240	230	230	230	278
20	220	240	260	310	300	270	270	240	300	300	p320c	p350c	370	390	330	290	310	250	260	260	250	250	250	250	285
21	230	220	220	220	220	250	270	p240c	p290c	320	p340c	370	350	370	p330c	p290c	270	280	280	320	310	240	220	250	279
22	230	230	210	220	240	250	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	220	250	250	260	260	280	290	240	...
23	220	220	210	230	260	260	280	240	220	p320c	380	p370c	370	350	310	340	230	250	270	300a	280	260	240	290	279
24	230	220	230	240	270	300	270	250	230	p300c	p330c	p340c	360	380	p310c	p290c	200	250	260	300a	280	260	260	290	277
25	260	220	220	230	250	270	...c	...c	...c	320	p340c	p350c	360	370	p300c	200	220	270a	250	250	p240c	230	230	230	...
26	220	220	220	250	240	250	260	250	230	310	p340c	340	420	350	...c	...c	...c	250	270	280	330	270	230	230	...
27	210	230	230	250	250	290	270	230	220	310	330	...c	...c	...c	...c	340	220	230	270	300	290	260	250	220	...
28	230	230	220	220	220	250	270	240	220	340	350	380	370	370	320	200	220	270	270	290	300	300	250	220	273
29	220	230	230	240	250	250	260	240	p240c	330	350	370	400	320	340	210	220	240	260	250	240	220	220	230	265
30	220j	230	220	260	290	310	260	240	220	330	340	370	400	400	370	p330c	210	250	270	290	250	220	220	230	280
31	230	240	250	280	240	310	270	230	220	300	340	320	370	340	350	330	230	250	270	280	270	240	220	220	275
MEDIAN*	220	230	230	240	260	270	270	240	260	320	340	350	360	360	330	300	230	255	270	280	275	240	230	230	275

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

MAY 1945

TABLE 357

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1945

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	4.8	4.7	4.8	4.8	4.8	4.5	4.3	...	...	...
2	...	...	4.8	4.6	4.6	4.7	4.6	4.6	4.7	4.5	4.2	...	...
3	...	...	...	4.8	4.7	4.7	4.6	4.7	4.5	4.5	4.0	...	...
4	...	...	...	4.6	5.0	4.8	4.8	4.7	4.6	p4.5c	...	...	...
5	...	...	4.7	4.8	4.6	4.8	4.7	4.6	4.4	4.8	...	...	...
6	...	...	...	p4.5c	4.6	4.8	4.7	4.6	4.5	4.4	...	...	...
7	...	...	...	4.5	4.5	4.6	4.7	4.5	4.5	4.5	...	...	...
8	...	...	4.4	4.4	p4.5c	4.6	4.5	4.5	4.5	4.6	...	...	...
9	...	...	4.2	4.7	4.5	p4.6c	4.6	p4.6c	4.5	...c	...	...	...
10	...	...	...c	...c	...c	p3.8c	p4.5c	4.6	4.5	...c	...	...	...
11	...	...	4.3	p4.4c	p4.4c	4.4	4.5	4.5	4.3	...c	...	...	...
12	...	...	...	4.3	4.3	4.5	4.5	4.5	4.4	4.4	...	...	...
13	...	...	4.3	4.4	4.4	4.5	4.6	4.5	4.4	4.1	...	...	...
14	...	...	4.3	4.4	4.5	p4.5c	4.6	4.5	4.4	...c	...c	...	...
15	...	...	...c	4.4	p4.5c	4.5	...c	...c	...c	...c	...	...	...
16	...	...	4.3	p4.4c	4.5	4.6	4.5	4.6	...c	...c	...c	...	...
17	...	...	4.3	4.5	4.6	4.6	4.6	4.6	4.4	4.4	...c	...	...
18	...	...	4.5	4.3	p4.5c	4.6	4.5	4.4	4.3	...c	...	...	...
19	...	...	4.4	4.3	4.7	4.7	4.6	4.6	4.3	4.5	...	...	...
20	...	...	4.2	4.4	p4.5c	p4.6c	4.7	4.7	4.5	4.3	4.2	...	...
21	...	...	...c	4.6	p4.6c	4.7	4.6	4.6	...c	...c	...	...	...
22	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
23	...	...	...c	p4.4c	4.7	p4.7c	4.7	4.5	4.4	4.5	...	...	...
24	...	...	...c	...c	p4.7c	p4.7c	4.8	4.8	...c	...c	...	...	...
25	...	...	...c	4.9	p4.7c	p4.6c	4.6	4.7	...c	...c	...	...	...
26	...	...	...c	4.7	p4.6c	4.6	4.9	4.6	...c	...c	...	...	...
27	...	...	...c	4.3	4.6	...c	...c	...c	...	4.3	...	...	...
28	...	...	...	4.6	4.7	4.8	4.7	4.7	4.4	...	...	...	...
29	...	...	...c	5.0	4.7	4.7	4.8	4.6	4.5	...	...	...	...
30	...	...	...	4.5	4.6	4.8	4.7	4.8	4.5	p4.2c	...	...	...
31	...	...	...	4.5	4.5	4.5	4.6	4.6	4.5	4.4	...	...	...
MEDIAN*	...	...	4.3	4.5	4.6	4.6	4.6	4.6	4.5	4.4	4.2	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	230	230	220	210	220	220	210	...	...	...
2	...	...	230	220	240	220	220	220	210	220	240	...	...
3	...	...	...	230	220	230	230	210	200	210	210	...	...
4	...	...	...	220	210	200	220	200	200	p210c	...	...	...
5	...	...	230	230	210	220	220	200	200	210	...	...	...
6	...	...	...	p220c	230	210	210	200	200	220	...	...	...
7	...	...	...	220	230	210	210	200	200	220	...	...	...
8	...	...	220	230	p220c	210	220	200	240	230	...	...	...
9	...	...	240	220	p210c	p210c	210	p200c	p200c	200	...	...	...
10	...	...	...c	...c	...c	p210c	...c	...c	...c	...c	...	...	...
11	...	...	230	p230c	p230c	230	200	200	200	210	...	...	...
12	...	...	...	230	220	220	200	200	200	210	...	...	...
13	...	...	230	230	210	220	200	200	200	210	...	...	...
14	...	...	220	230	230	p220c	210	210	210	...c	...	...	...
15	...	...	...c	220	p220c	220	...c	...c	...c	...c	...	...	...
16	...	...	220	p220c	220	210	220	200	...c	...c	...	...	...
17	...	...	220	220	220	220	200	220	220	220	...	...	...
18	...	...	220	220	p220c	230	220	210	200	...c	...	...	...
19	...	...	220	220	210	190	210	200	220	210	...	...	...
20	...	...	230	220	p210c	p200c	200	220	200	200	240	...	...
21	...	...	...c	220	p230c	240	220	220	...c	...c	...	...	...
22	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
23	...	...	...c	p210c	210	p210c	220	220	200	220	...	...	...
24	...	...	...c	...c	p220c	p220c	220	200	...c	...c	...	...	...
25	...	...	...c	210	p220c	p220c	220	200	...c	...c	...	...	...
26	...	...	...c	230	220	200	210	200	...c	...c	...	...	...
27	...	...	...c	220	220	...c	...c	...c	...c	210	...	...	...
28	...	...	...	220	210	200	200	210	200	...	...	...	...
29	...	...	...c	220	200	220	210	200	200	...	...	...	...
30	...	...	...	220	200	210	200	210	200	p210c	...	...	...
31	...	...	...	210	210	210	200	200	210	210	...	...	...
MEDIAN*	...	...	225	220	220	220	210	200	200	210	240	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 358

MAY 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1945

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	1.2	2.0	2.2	2.2	2.3	2.2	2.1	2.0	1.9	1.7	1.2	...
2	1.2	1.2	1.7	2.0	2.2	2.2	2.1	2.1	2.0	1.8	1.7	1.2	...
3	1.2	1.2	2.2	2.4	2.5	3.0	3.0	2.5	2.3	2.3	2.0	1.2	...
4	1.1	1.2	2.2	2.3	2.3	2.4	2.5	2.4	2.4	p2.3c	1.3	1.2	...
5	...	1.2	2.3	2.4	2.5	2.5	2.5	2.4	2.4	2.3	2.2	1.2	0.9
6	1.3	1.3	p2.2c	p2.3c	2.4	2.4	2.4	2.4	2.3	2.3	2.0	1.1	...
7	1.2	1.2	2.1	2.3	2.3	2.3	2.4	2.3	2.3	2.3	1.3	1.2	...
8	1.2	1.2	1.8	1.8	1.7	2.0	2.2	2.0	1.9	1.7	1.2	1.1	...
9	1.0	1.1	1.2	1.8	1.8	2.0	2.1	1.8	p1.8c	1.7	1.0	0.9	...
10	...c	...c	...c	...c	...c	1.4	p1.8c	1.8	p1.9c	2.0	1.7	1.2	...
11	0.9	0.9	1.7	...c	...c	...c	2.0	2.0	2.0	2.0	1.8	...	...
12	...	1.2	1.7	1.8	2.0	2.5	2.0	2.0	2.0	1.7	1.6	1.0	...
13	1.2	0.9	1.7	1.7	1.8	2.0	2.0	2.0	1.9	1.7	1.7	1.5	...
14	0.9	p1.1c	1.7	1.7	1.7	p1.8c	2.0	1.8	1.7	p1.8c	1.9	1.0	...
15	...	1.3	1.3	2.0	...c	...c	...c	...c	...c	1.7	1.0	0.7	...
16	1.2	p1.2c	1.2	p1.8c	2.0	2.2	2.1	1.9	...c	...c	...c	...c	...
17	0.9	1.1	1.2	2.0	1.9	1.9	2.0	2.0	1.9	1.7	p1.2c	1.2	1.0
18	0.9	1.2	1.7	1.9	p2.0c	2.1	2.0	2.0	1.8	p1.7c	1.3	1.6	...
19	0.7	1.0	1.7	1.7	1.8	1.8	1.9	2.0	2.0	1.8	1.7	1.2	...
20	0.9	1.1	1.2	1.7	p1.8c	p1.8c	1.9	1.8	1.8	1.7	1.3	1.2	...
21	1.0	p1.1c	p1.3c	1.7	p2.0c	2.3	2.2	2.0	...c	...c	...c	...c	...
22	...	1.3	...c	...c	...c	...c	...c	...c	...c	...c	1.7	1.5	...
23	0.9	1.0	1.1	p1.[illegible]c	2.0	p2.0c	2.0	2.0	1.9	1.8	1.7	1.7	...
24	...	1.6	1.8	p1.9c	p2.0c	p2.1c	2.2	2.0	p1.9c	p1.8c	1.7	1.5	...
25	...c	...c	...c	1.9	...c	...c	...c	...c	...c	1.7	1.2	...c	...
26	1.1	1.0	1.7	1.7	1.7	1.9	1.8	1.7	p1.8c	1.7c	1.0	...	...
27	0.9	1.0	1.7	1.7	1.7	...c	...c	...c	...c	1.7	1.2	1.0	...
28	1.1	1.2	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.7	1.2	1.0	...
29	...	1.4	p1.7c	1.8	1.8	2.0	1.8	1.9	1.8	1.7	1.7	1.1	...
30	1.0	1.7	1.7	p2.0c	1.9	1.9	1.9	1.9	1.8	p1.8c	1.7	1.1	...
31	1.1	1.6	1.7	1.8	1.8	1.8	1.9	1.9	1.9	1.7	1.7	1.0	...c
MEDIAN*	1.1	1.2	1.7	1.8	2.0	2.0	2.0	2.0	1.9	1.8	1.7	1.2	1.0

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.4	2.5	3.0	...	...	...	...	...	...	...	3.0	2.2	1.0
2	1.4	2.5	3.0	...	...	...	...	...	...	3.0	2.8	2.2	...
3	1.4	2.6	3.0	...	...	...	...	...	...	3.1	2.8	2.2	1.0
4	1.5	2.4	3.1	...	...	...	...	...	...	...c	2.6	...c	...
5	1.3	2.5	3.1	3.4	3.6	...	...	...	...	3.3	3.2	2.2	1.0
6	1.4	2.6	3.1	p3.3c	...	...	...	3.5	...	...	2.6	2.1	0.8
7	1.4	2.5	3.2	...	...	...	...	...	...	...	...	2.0	...
8	1.3	2.3	2.8	...	...	...	...	...	...	...	2.7	2.1	0.9
9	1.2	2.4	...	3.4	...	...	...	...	...	...	2.6	2.0	0.9
10	0.9	...c	...c	...	...	...	...	...	...	...	...	1.9	0.9
11	...	1.4	2.2	2.8	...	...	...	...	...	...	2.7	1.8	...
12	1.1	2.2	2.2	2.7	...	...	...	...	...	...	...	...c	...
13	1.2	2.3	2.3	...	...	...	...	...	...	...	2.5	...	0.8
14	1.2	p2.3c	2.7	...	...	...	3.5	...	3.0	...	...	2.0	0.8
15	...c	...c	...c	...c	...	...	...	...	...	3.0	2.8	2.0	...
16	1.3	p2.3c	2.2	...c	...	...	...	...	...	...c	...c	...c	...c
17	1.3	2.3	...	...	...	...	...	...	3.5	3.0	...a	...c	...
18	1.3	2.2	2.7	...	...	...	...	...	3.4	...	2.7	2.0	...
19	1.3	2.3	2.9	3.2	3.5	3.5	...	...	...	3.1	2.6	2.0	0.9
20	1.3	2.3	2.8	3.2	...	...	...	...	3.5	3.0	2.7	2.1	...
21	1.2	p2.3c	p2.8c	3.2	...	...	...	...	...	...c	...c	...c	...
22	...	...c	...c	...c	...	...	...	...	...	...	2.5	2.0	...
23	1.4	2.4	2.9	...	...	...	...	...	...	...	2.6	2.0	...
24	...	2.4	3.0	...	...	...	...	3.5	...	...	2.6	2.0	...
25	...c	...c	...c	3.5	...	...	...	...	...	...	2.6	...c	...
26	1.3	2.4	2.9	3.4	3.4	3.5	...	3.4	...	...	2.0	0.9	...
27	1.3	2.3	2.8	...	...	...	...c	...	...	...	2.5	2.0	0.8
28	1.2	2.3	2.8	...	3.4	3.6	3.6	...	3.4	3.0	2.6	2.0	0.9
29	1.3	...	p2.8c	3.3	3.5	...	...	3.5	...	...	2.7	2.2	...
30	1.2	2.2	2.9	...	3.4	...	...	...	...	p2.8c	2.4	1.9	...
31	1.3	2.2	2.8	...	...	...	...	3.5	...	3.0	2.6	...	...c
MEDIAN*	1.3	2.3	2.8	3.3	3.4	3.5	3.6	3.5	3.4	3.0	2.6	2.0	0.9

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 359

JUNE 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1945

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	4.2	3.5c	2.5	2.4	2.5	2.5	3.6	5.9c	7.4	7.3	6.9	7.1	6.9	6.8j	7.9	8.1	8.0	8.0	8.1	7.4	7.4	7.0	6.2	6.1	6.0
2	5.6	4.4	4.1	3.8	3.4	3.5	p4.0f	5.8	7.5	7.0	6.6	6.7	6.6	6.7	7.0	7.2	p6.9c	7.0	p7.4c	p7.2c	6.9	7.5	6.9	5.1	6.0
3	4.9	4.7	5.1	4.7	3.9	3.5	3.9	5.9	7.0	7.3	6.9	6.9	6.4	6.7	6.6	6.4	7.3	p6.9c	p7.4c	7.0	6.5	7.7	7.7	5.8	6.1
4	5.0	4.2	3.8	3.5	[illegible]	[illegible]	2.7	5.1	5.8	5.6	6.2	6.4	6.3	p6.7c	6.5	p6.3c	6.3	7.1	7.0	6.0j	6.2	7.0	6.6j	4.8	5.5
5	5.6j	5.9	5.5j	5.1	4.7	4.5	4.5	6.0	7.0	7.3	7.0	6.2	7.3j	7.3h	7.4	p7.1c	6.7	p7.0c	7.2	6.9	6.8	7.6j	7.5j	5.8	6.4
6	5.8	6.3	p6.0c	p4.9c	p4.4c	p3.9c	p4.2c	p7.1c	p7.6c	8.1	8.2	p7.0c	7.2	7.7	7.9	8.4	8.0	p7.5c	p7.2c	...c	...c	...c	5.9	6.2	...
7	5.6j	5.4	p5.2c	4.1	3.5	p3.3c	2.6	5.0	6.7	7.7	8.1	6.0	8.3	7.6	6.6	...c	...c	...c	...c	...c	p6.7c	p6.5c	6.2	6.0	...
8	p5.8c	p5.5c	p4.5c	p4.2c	p3.9c	p3.7c	p3.5f	5.6	p6.7c	p6.9c	p6.8c	7.6	7.8	8.1	8.3	8.1	7.5	7.5	6.7	6.4	6.7	7.0	5.8	5.9	6.3
9	5.4	4.2	4.0	3.6	3.6	3.2	3.6	5.3	6.5	6.7	6.7	6.4	7.0	6.8	6.8	7.0	7.2	7.8	7.3	6.4	6.4	6.5	6.2	5.6	5.8
10	5.5	5.6	4.9	4.4	3.8	3.7	3.8	6.4	8.0	8.3	7.5	7.0	7.1	6.9	7.1	7.7	8.4	8.8	8.3	7.7	p7.4c	7.2	6.7	6.2	6.6
11	6.5	p5.9c	5.6	4.9	3.9j	2.5	p3.1c	5.8	p6.9c	7.2	p6.7c	6.1	6.4	6.6	6.8	7.9	7.6	8.2	6.1	6.7	7.0	7.0	5.6	4.3	6.1
12	4.0	p3.8j	p3.9j	p3.6c	p3.2c	p2.6c	p4.3c	5.9	7.5	8.0	7.3	p6.5c	6.4	6.4	6.2	6.6c	p7.7c	8.8	8.6	p6.6j	p6.4c	p6.3c	p6.1c	6.0	5.9
13	4.8	4.3	3.9	3.2	2.7j	2.2	3.3	6.5	8.4j	9.0	8.6j	6.5j	...c	...c	...c	...c	8.4	8.4	8.4j	...c	...c	...c	p6.6c	5.6	...
14	5.4	5.6j	5.0	3.6	3.2	2.9	3.7	6.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	p7.4c	7.8	7.2	7.2	7.1	6.9	5.1	...
15	4.7	3.3	2.4	...c	...c	...c	...c	...c	...c	7.3	7.3	7.1	7.6	7.8	7.9	7.8	6.9	7.1	7.4	6.9	7.1	p8.2c	6.5	4.6	...
16	4.4	5.0	4.8	4.0	3.6	3.3	p3.8f	5.9	6.8	7.6	7.5	6.8	6.2	6.6	6.7	7.2	7.1	p7.1c	p6.7c	p6.3c	5.9j	...c	...c	...c	...
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.0	9.4	8.4h	7.8	7.3	6.8h	6.7	6.3	6.1	5.8	5.1	5.5	5.6j	5.8j	5.9	...
18	5.3	4.5	4.6	3.8	3.6	3.2j	2.9j	5.7	7.3	7.9	8.7	7.7	8.5	8.4	8.1h	8.3	8.2	8.2	7.0	6.9	7.1	8.0	6.9	6.1	6.6
19	6.1	6.2	6.2	5.1	4.1	4.3	4.4	5.6	p6.7c	7.3	6.9	6.9	6.6	7.1	6.9	6.9h	7.2	6.8	7.1	...c	...c	...c	...c	...c	...
20	...c	...c	...c	...c	...c	...c	...c	6.5	p7.4c	8.3	7.3h	p7.5c	7.6	7.4	7.6	7.2	8.0	8.4	8.1	7.7	7.3	6.6	6.5	6.1	...
21	4.9	4.6	4.7	4.5	3.6	2.9	3.6	6.0	7.3	8.3	7.9	7.3	6.9	6.7	6.7	6.7	p6.7c	7.0	8.1	6.3	6.8	6.9	6.3	5.6	6.1
22	4.1	3.6	3.6	3.3	2.7	1.8	2.6	5.7	7.2	7.5	7.0	6.8	p6.9c	p6.9c	7.0	7.0	8.1	7.4	6.5j	6.0	5.8	6.0	5.6	5.6	5.6
23	5.5	5.1	5.6	4.8	2.7	1.8	3.2	6.2	7.7	8.4	8.5	8.4h	7.3h	7.5	7.6	7.1	6.9	7.5	7.4j	6.6	6.9	8.3	5.6	5.0	6.3
24	5.6	4.5	4.3	3.2	2.6	2.6	2.8	5.3	7.0	6.7	6.4	6.5	6.9	6.3	6.4	6.7	6.9	7.3	6.6	6.7	7.1	p7.8c	6.4	5.5	5.8
25	5.8	5.3	4.8	4.3	3.2	2.9	2.7	5.3	6.9	7.8	p7.1c	p7.0c	6.9	6.8	7.3	7.1	6.9	p7.0c	7.0	7.1	7.1	7.2	6.0	5.3	6.0
26	5.1	4.8	4.8	4.1	3.3	2.5	2.7	5.5	7.1	7.1	7.1	6.7	6.2h	6.8h	7.2	7.4	7.4	7.2	7.2	7.3	7.8	7.2	5.1	4.7	5.9
27	5.9	6.4	6.0f	4.3f	3.5f	...f	p2.6f	5.3	7.3	7.4	p7.0c	6.7	7.0	7.3	6.8	7.1	8.0	7.6	7.3	8.0	7.5	6.6	6.9	5.6	...
28	5.6	5.4	5.2	4.4	3.6	2.5	2.4	5.5	7.2	7.4	p7.0c	6.6	6.4	6.9	6.7	6.6	6.9	7.8	7.3	5.7j	6.3j	6.5	6.4	5.6f	5.9
29	4.3	4.1	4.4	4.2	3.5	p3.3f	p3.5f	6.0	7.1	7.3	6.2	6.4	6.6	6.4	6.5	6.5	6.8	6.6	6.1	p5.3c	p5.0c	p5.4c	...f	p4.9f	...
30	...f	...f	...f	...f	...f	...f	...f	5.6	7.4	7.9	7.3	6.1	6.3	6.9	6.8	7.2	6.8	6.8	7.0	5.6	...f	...f	...f	...f	...
31																									
MEDIAN*	5.4	4.8	4.8	4.2	3.5	3.0	3.5	5.8	7.2	7.4	7.1	6.9	6.9	6.9	6.8	7.1	7.2	7.4	7.3	6.7	6.8	7.0	6.4	5.6	6.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 360

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1945 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JUNE 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	240	260	290	290	250	270	240	220	330	370	360	370	320	350	300	270	240	270	280	250	230	230	220	278
2	220	230	240	260	260	270	280	240	230	330	340	400	390	330h	340	300	q220c	240	p260c	p270c	250	220	210	230	273
3	220	230	240	250	260	250	270	230	300	400	400	390	350	400	320	210	230	p230c	260	270	260	230	210	230	277
4	210	230	230	260	250	270	270	230	220	330	p370c	400	370	400	320	p300c	230	250	240	260	240	230	210	250	274
5	240	230	250	270	240	240	270	240	290	310	370	390	420	310h	350	p290c	210	250	240	250	250	250	230	230	276
6	240	240	270	220	230	270	230	p240c	p290c	300	340	p340c	310	340	370	280	220	p250c	260	280	290	250	230	230	272
7	240	230	240	240	290	370	310	p250c	300	320	340	330	380	240	380	...c	...c	...c	...c	...c	240	230	240	240	...
8	250	250	260	320	280	250	290	240	310	300	350	350	350	330	340	340	220	250	280	330	280	270	220	230	287
9	230	230	240	240	250	250	290	250	240	p330c	400	400	410	390	370	360	340	250	260	280	270	260	230	230	292
10	240	240	260	310	310	240	270	250	290	300	400	370	420	370	360	330	240	260	260	260	260	240	230	240	290
11	240	240	250	230	230	260	280	250	310	330	370	390	390	360	360	320	230	250	260	260	270	220	230	220	281
12	230	240	250	250	240	280	270	250	300	330	370	370	410	400	390	200	240	270	260	290	290	240	220	220	284
13	230	240	250	250	260	260	260	240	210	330	320	360	330	390	p360c	320	220	250	270a	280	260	250	230	220	275
14	230	230	230	250	250	260	280	250	300	320	370	...c	...c	...c	...c	...c	...c	q240c	260	270	260	230	230	230	...
15	220	240	240	...c	...c	...c	...c	...c	...c	300	330	370	400	360	360	310	230	270	290	290	270	240	230	240	...
16	240	230	240	240	250	260	280	260	240	340	400	370	480	430	360	210	220	p260c	p250c	240	310	...c	...c	...c	...
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	340	360	410	390	300	280	220	270	310	350	290	270	240	220	...
18	230	230	220	240	270	340	280	250	230	320	330	360	360	380	340	330	220	270	270	270	250	260	240	270	282
19	250	240	220	230	250	250	270	240	p310c	340	320	410	380	200	200	290	350	260	280	...c	...c	...c	...c	...c	...
20	q230c	q250c	q260c	...c	...c	...c	...c	250	p310c	340	330	330	330	390	350	260	240	270	260	270	250	230	220	220	...
21	230	240	250	240	240	260	280	240	230	300	330	370	400	390	370	380	p220c	250	290	300	270	220	220	230	281
22	230	230	230	230	240	290	290	250	310	350	350	400	p390c	p390c	380	430	230	240	300	330	320	280	240	230	298
23	240	230	220	210	230	250	270	240	280	280	340	350	390	370	410	200	230	260	250	240	230	210	220	230	266
24	230	220	230	240	250	290	300	250	300	340	410	400	410	380	380	200	220	250	290	290	250	220	240	250	285
25	230	230	230	220	240	250	300	240	230	300	p320c	p370c	400	370	410	380	220	p240c	250	260	240	220	240	230	276
26	230	230	230	250	270	320	270	240	320	310	380	370	430	370	350	200	200	260	270	250	230	230	230	250	279
27	240	250	300	270	240	270	280	230	230	230	p330c	380	360	380	200	370	310	240	270	260	250	230	230	240	275
28	240	230	220	230	220	270	300	240	290	340	p370c	400	400	400	340	210	220	230	280	300	280	270	240	230	281
29	220	250	250	250	250	250	260	250	290	330	390	450	400	430	450	370	240	290	350	320	290	230	240	240	304
30	240	230	240	280	300	330	270	250	300	340	350	430	400	370	370	350	230	240	290	340	360	300	330	260	308
31																									
MEDIAN*	230	230	240	250	250	260	280	240	290	330	350	370	390	380	360	300	230	250	270	280	260	230	230	230	280

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 361

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1945 — JUNE 1945

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	4.5	4.7	4.6	4.8	4.5	4.5	4.2	3.8	...	...
2	...	...	...	4.4	4.6	4.7	4.6	4.5h	4.5	4.1	...	...	...
3	...	...	4.2	4.4	4.6	4.5	4.6	4.6	4.3	...	...	...	...
4	...	...	...	4.3	4.6	4.7h	4.5	4.6	4.3	p4.2c	...	...	...
5	...	...	4.3	4.6	4.5	4.6h	4.6	4.5h	4.3	...c	...	...	...
6	...	...	...c	4.4	4.5	p4.6c	4.6	4.3	p4.3c	4.3	...	...	...
7	...	...	4.2	4.4	4.5	4.6	4.7	4.5	4.3	...c	...	...	...
8	...	...	4.4	4.4	4.5	4.5	4.6	4.4	4.4	4.3	...	...	...
9	...	...	4.3	p4.3c	4.5	4.5	4.6	4.5	4.4	4.6	4.3	...	...
10	...	...	...	4.5	4.5	4.7	4.6	4.6	4.6	4.3	...	...	...
11	...	...	4.2	4.5	4.5	4.6	4.6	4.6	4.5	4.5	...	...	...
12	...	...	4.4	4.5	4.7	p4.7c	4.7	4.7	4.6	...	...	...	...
13	...	...	...	4.6	4.6	4.8	4.6	4.7	...c	4.5	...	...	...
14	...	...	4.4	4.7	4.7	...c	...c	...c	...c	...c	...	...	...
15	...	...	...c	4.6	4.6	4.8	4.8	4.8	4.6	4.3	...	...	...
16	...	...	...	4.7	4.9	4.6	4.9	4.7	4.5	...	...	...	...
17	...	...	...c	...c	4.8	4.7	4.8	4.7	4.3	4.0	...	...	...
18	...	...	...	4.8	4.8	4.9	4.8	4.8	4.7	4.5	...	...	...
19	...	...	...c	4.8	4.8	4.8	4.8	p4.7c	p4.6c	4.2	4.3	...	...
20	...	...	...c	4.6	4.5	p4.7c	4.7	4.7	4.6	4.6	...	...	...
21	...	...	...	4.4	4.6	4.7	4.6	4.7	4.6	4.7	...	...	...
22	...	...	4.3	4.7	4.6	4.7	p4.7c	p4.6c	4.6	4.7	...	...	...
23	...	...	4.4	4.2	4.6	4.7	4.6	4.7	4.7	...	...	...	...
24	...	...	4.2	4.5	4.6	4.5	4.6	4.4	4.4	...	...	...	...
25	...	...	...	4.3	4.5	p4.6c	4.6	4.7	4.7	4.5	...	...	...
26	...	...	4.5	4.3	4.6	4.6	4.6	4.4	4.4	...	...	...	...
27	...	...	...	...	p4.5c	4.4	4.5	4.5	p4.4c	4.2	4.2	...	...
28	...	...	4.1	4.3	p4.4c	4.5	4.5	4.3	4.3	...	...	...	...
29	...	...	4.2	4.3	4.5	4.4	4.4	4.3	4.5	4.2	4.2	...	...
30	...	...	4.2	4.3	4.3	4.4	4.4	4.3	4.3	4.3	...	...	...
31													
* MEDIAN	...	...	4.3	4.4	4.6	4.6	4.6	4.6	4.5	4.3	4.2	...	...

MINIMUM VIRTUAL HEIGHT OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	220	210	210	200	210	210	210	230	...	...
2	...	...	...	210	210	200	200	200	210	220	...	...	...
3	...	...	210	210	200	200	200	200	210	...	...	...	...
4	...	...	...	210	p200c	200	210	200	200	p220c	...	...	...
5	...	...	210	220	210	210	220	200	210	...c	...	...	...
6	...	...	...c	220	210	p210c	200	210	210	220	...	...	...
7	...	...	230	220	210	210	220	200	200	...c	...	...	...
8	...	...	230	220	210	230	220	220	220	200	...	...	...
9	...	...	230	p220c	220	220	210	210	210	220	230	...	...
10	...	...	...	220	220	210	210	210	220	220	...c	...	...
11	...	...	...c	220	220	210	210	200	210	210	...	...	...
12	...	...	230	220	220	p220c	210	200	210	...	...	...	...
13	...	...	...	210	220	210	210	220	...c	220	...	...	...
14	...	...	240	230	220	...c	...c	...c	...	...	...	...	...
15	...	...	...c	220	210	210	210	210	210	210	...	...	...
16	...	...	...	210	210	230	200	200	200	...	...	...	...
17	...	...	...c	...c	220	210	200	210	200	200	...	...	...
18	...	...	...	220	220	220	230	220	210	220	...	...	...
19	...	...	...c	210	200	200	200	p200c	p210c	210	240	...	...
20	...	...	...c	210	200	p210c	220	210	200	190	...	...	...
21	...	...	...	210	200	210	220	210	200	210	...	...	...
22	...	...	230	230	210	210	p210c	p200c	210	210	...	...	...
23	...	...	230	210	210	200	210	200	200	...	...	...	...
24	...	...	240	220	210	210	200	200	200	...	...	...	...
25	...	...	...	220	200	p200c	200	200	200	200	...	...	...
26	...	...	220	220	200	210	220	200	200	...	...	...	...
27	...	...	...	...	p210c	230	210	200	p200c	220	200	...	...
28	...	...	220	220	p210c	220	200	200	210	...	...	...	...
29	...	...	220	220	200	210	200	200	200	200	220	...	...
30	...	...	230	220	210	200	200	200	200	200	...	...	...
31													
* MEDIAN	...	...	230	220	210	210	210	200	210	210	230	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 362

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1945 JUNE 1945

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	1.4	1.7	1.6	1.7	1.8	1.8	1.8	1.7	1.8	1.7	1.1	...	...	2.4	2.9	3.3	3.3	...	...	...	...	...	2.6	1.9	0.9
2	0.9	1.2	1.6	1.7	1.8	1.8	1.7	1.8	1.7	1.7	1.6	1.5	...	1.1	2.3	2.7	...	...	...	...	3.6	3.4	...	...	2.0	...
3	...	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.7	1.7	1.2	p1.2c	...	...	2.2	2.7	...	3.4	3.5	3.5	...	3.3	...	2.5	p2.2c	1.0
4	0.9	1.1	1.6	1.7	1.8	1.7	1.7	1.7	1.7	p1.6c	1.5	1.2	...	1.3	2.3	2.6	...	...	3.5	...	3.5	...	...	...	2.0	...
5	0.9	1.2	1.7	1.7	1.8	1.7	p1.8c	1.8	1.7	p1.6	1.5	1.1	...	1.2	2.3	2.7	...	...	3.6	...	3.5	...	...	2.5	2.1	1.2
6	...c	...c	...c	1.8	1.8	p1.8c	1.7	1.8	1.8	1.6	1.7	...c	...	...c	...c	...c	3.3	3.4	...c	3.4	...	...	2.9	2.5	p2.0c	1.0
7	...	1.7	1.2	1.7	1.7	1.8	1.8	1.8	1.7	...c	...c	...c	...	...	p2.0c	2.6	...	3.3	...	...	3.4	3.3	...c	...c	...c	...
8	...	1.0	1.7	p1.7c	p1.8c	1.9	2.0	1.9	1.9	1.7	1.2	1.1	...	...	2.4	...	...	...	...	...	...	...	2.9	2.5	2.3	...
9	1.1	1.0	1.2	1.7	1.8	2.0	2.0	2.0	p2.4c	1.9	1.7	1.2	...	1.2	2.4	2.8	p2.9c	...	...	...	...	...	...	...	2.0	1.0
10	...	1.3	1.8	1.8	q3.0c	p3.0c	p2.5c	p3.0c	p2.4c	p2.5c	...c	...	...	1.2	...	...	3.2	...	3.6	...	...	...	...	...c	...	...
11	...	1.7	1.9	1.8	p1.8c	q3.0c	q3.0c	q2.5c	q3.6c	2.0	1.8	1.3	...	1.2	2.1	p3.0c	3.3	...c	...	...	3.5	...	...	...	2.0	1.1
12	...	1.8	1.8	q3.0c	q3.0c	q3.0c	q3.0c	2.5	2.5	2.0	1.8	1.0a	...	1.8	2.3	3.0	...	3.6	...	...	...	...	3.1	...	...a	1.0
13	...	...	q2.5	q2.5	q2.7	q3.0	q3.1	q3.0	...c	q2.5	q1.8	q1.6	...	1.6	p2.2c	3.0	...	...	...	...	...	...	...	2.8	...	...
14	...	q1.3	q1.9	q2.4	q2.5	...c	...c	...c	...c	...c	...c	q1.2	...	...	...	2.9	...	...	...	...	...	...	...	...	2.2	1.2
15	...	...c	...c	q2.0	q2.4	q3.0	q3.1	q3.0	q3.0	q1.9	q1.8	...	...	...	...c	...c	3.3	...	...	...	...	...	...	...	...	...
16	...	q1.7	q2.5	q1.9	q3.0	q2.5	q3.0	q3.0	q3.0	q2.4	q1.8	p1.4c	...	1.2	...	3.1	...	...	...	...	...	3.5	...	...	...	...
17	...	...c	...c	q3.0	...c	q3.0	q3.0	q3.0	q3.0	q2.0	q1.8	q1.0	...	...	...c	...c	...	...	...	...	...	...	...	...	2.0	1.0
18	...	q1.3	q1.8	q2.3	q2.3	q3.0	q3.0	q3.0	q2.0	q1.9	q1.4	q1.2	...	1.2	2.3	3.0	3.3	3.4	...	...	...	...	...	...	...	1.1
19	...	q1.7	...c	q1.8	q2.5	q2.7	q2.9	q3.0	q2.9	q3.0	q1.8	q1.0	...	...	...	...	...	3.4	...	...	...	3.5	3.2	3.0	2.1	1.0
20	...	q1.4	...c	q2.4	q2.4	...c	q3.0	q2.6	q1.9	q1.9	q1.7	...c	...	...	2.3	p3.0c	3.3	3.3	...	...	...	3.3	3.1	...	...c	...
21	...	q1.2	q1.8	q2.5	q3.1	q3.0	q3.0	q2.7	q3.0	q1.9	p3.0c	q1.0	...	1.1	2.3	3.1	3.4	3.4	3.5	...	...	3.4	3.1	p3.1c	2.0	1.0
22	...	q1.7	q1.9	q3.0	q3.0	q3.1	...c	...c	q3.0	q1.9	q1.8	q1.8	...	1.2	2.5	...	...	3.3	...	...c	...c	...	3.1	2.8	2.0	1.0
23	...	1.8	...	p1.8c	1.8	1.9	1.8	1.8	1.8	1.8	1.7	1.6	...	1.2	2.2	3.1	3.3	...	...	3.6	...	3.4	3.1	2.7	1.9	...a
24	...	1.1	1.6	1.7	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.5	...	1.1	2.2	...	3.0	...	...	...	...	...	3.0	2.5	1.9	...
25	...	1.2	1.2	1.7	1.7	p1.8c	1.8	1.8	1.8	1.8	1.7	p1.5c	1.0	...	2.3	2.7	3.1	3.3	...	...	3.6	...	3.0	2.5	...c	...
26	...	1.2	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.6	1.3	1.0	...	2.2	2.8	3.1	...	...	3.9	...	...	3.1	2.7	2.0	...
27	...	1.2	1.3	1.7	p1.8c	1.8	1.8	1.7	1.7	1.7	1.2	1.1	0.9	1.1	2.1	2.7	...	...c	...	...	...	3.3	3.1	2.5	...a	...
28	...	1.1	1.6	1.8	p1.8c	1.8	1.8	1.8	1.9	1.8	1.7	1.2	...	...	2.2	2.7	3.1	p3.3c	3.5	...	...	...	...	2.6	1.8	1.0
29	...	1.2	1.3	1.7	1.7	1.8	1.7	1.8	1.7	1.7	1.3	1.1	...	1.1	2.1	2.7	3.0	3.2	...	...	...	...	3.0	2.4	2.1	0.9
30	...	1.2	1.3	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.3	1.3	...	1.1	2.2	2.7	...	...	...	...	...	...	2.9	2.5	1.9	...
31																										
MEDIAN*	0.9	1.2	1.6	1.7	1.8	1.8	1.8	1.8	1.8	1.7	1.6	1.2	1.0	1.2	2.3	2.9	3.3	3.3	3.5	3.6	3.5	3.4	3.1	2.5	2.0	1.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 363

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1945 CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND JULY 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p6.1f	p5.6f	...f	...f	...f	...f	...f	5.7	7.4	6.2h	p7.1c	8.1	7.2h	6.9	6.9	6.9h	6.7h	6.3	6.5	p5.6c	p4.8c	...f	p5.3c	p5.3c	...
2	4.2	3.6j	3.1	2.9	2.2	2.1	2.3	4.9	5.8	p6.2c	...c	...c	...c	...c	6.7	7.1	7.3	p6.8c	6.2j	p5.1f	...f	...f	...f	...f	...
3	...f	...f	...f	4.3	4.0	3.2	p3.2c	5.0	p6.3c	7.0	6.5	6.5	6.6	6.5	6.1h	6.7	...c	...c	...c	6.8	p6.7c	p6.6c	...c	...c	...
4	...c	...c	...c	...c	...c	1.4	2.8	5.3	6.5	7.3	7.0	7.0	6.6	6.7	7.0	6.6	6.5	6.9	5.6c	...f	...f	...f	5.5	6.3	...
5	5.2	5.4	5.5	5.3	4.8	2.9	3.1h	5.3	6.9	6.6	5.9	5.8	6.1	6.1	5.9	6.1	6.4	6.2	6.2j	5.9	5.3	6.5	6.5	5.9	5.7
6	5.6	4.1	3.6	3.6	2.9	2.8	3.2	5.6	p7.0c	8.3	7.7	7.4	6.9	7.8	8.6	7.7	6.9h	6.8h	6.9	7.3	6.9	5.4	4.1	3.2	5.9
7	3.0	3.3	2.7	2.3	2.2	2.0	2.7	5.3	7.2	7.7	6.3	6.1	6.1	6.4	6.9	7.4	7.6	6.9	6.9	7.3	7.1	7.2	...c	...c	...
8	...c	...c	...c	...c	...c	...c	...c	6.4	7.0	7.1	p6.6c	6.8h	6.4	6.5	7.5	7.1	6.8	5.9	6.7	p6.0c	p5.9c	7.1	4.8	4.0	...
9	3.6	3.0	4.1	3.6	3.2	2.4	3.0	5.4	6.8	7.0	6.9	6.2	6.8	6.9	7.1h	7.4	7.9j	p6.0c	6.6	7.2j	7.4	6.6	6.3	6.1	5.9
10	6.1	5.2	4.8	3.8	2.7	2.2	3.0	5.3	6.3	p6.9c	6.5	6.3	6.1	6.1	5.6	7.2	7.1	6.9	7.0c	6.8c	6.8	7.0	6.3	6.2	5.5
11	6.0	6.1	6.4f	6.0	5.2	4.7	4.6	6.1	7.1	7.6	7.1	6.3	6.0	6.2	6.4	6.5	p6.4c	6.7	7.3	7.0	7.1	7.3	5.9j	4.5	6.3
12	4.2	4.3	4.0	3.4	3.3f	...f	3.1f	p5.1c	7.1	7.3	6.7	6.4	6.4	6.3	6.1	6.2	6.6	7.2	7.1	7.0	6.4	6.6	6.0	4.7	...
13	4.2	4.0	4.6	4.4	2.9	2.4	2.5	5.8	5.6	7.0	6.7h	p6.6c	6.5	6.7	7.0	7.3	7.0	7.2	7.2	6.2j	5.8j	5.7	6.4c	5.4	5.7
14	5.7	4.9	3.9	3.3	2.1	1.3b	2.8	5.9	6.7	7.3	6.9	7.0	7.5	7.7	7.0	7.8	7.6	7.2	6.9	5.6	5.7	5.7j	6.1j	6.5	5.8
15	6.2f	...f	5.1f	4.5	3.7	3.1	3.3	5.6	7.3	8.2	6.3	7.0	7.4h	7.0	6.7	6.5	6.3	6.3	5.7	4.0	4.0	...f	5.6	6.6	...
16	6.4	5.9	5.5	3.8	2.7	2.5	3.0h	p5.4c	p6.7c	7.3	6.8	7.3	6.6	7.2	8.4	7.5	7.8	7.4	7.7	6.8	6.7	7.3	7.1	6.8	6.3
17	5.6	5.4	4.9	4.4	3.5	3.3	p3.3c	5.8	6.9	7.2	7.7	8.0	7.8	7.1	7.7	7.6	7.5	8.0	9.2	8.1	7.9	7.6	7.5	7.9	6.7
18	8.2	7.4	6.8	6.1	5.9	5.8	5.8	6.5	6.7	7.7	8.4	8.2	7.9	8.0	7.9	7.8	6.9	6.6	6.8	6.6c	5.7	5.8	5.3	5.4	6.8
19	4.9	5.7	6.0	...f	5.5	4.9	4.1	p5.8c	p6.6c	7.4	7.2	7.3	7.2	7.0	7.3	7.4	7.5	7.2	7.2	6.6	6.5j	7.9	6.7	5.9	...
20	6.1	5.0	4.4	3.4	2.3	2.2	2.6	5.5	7.1	7.6	7.2	7.5	6.9	7.2	7.3	7.2	p7.3c	7.0	7.6	7.5	7.3	7.4	6.1	5.6	6.1
21	5.3	5.4	5.0	4.4	3.6	3.3	3.5	6.1	7.2	8.2	7.8	8.0	p7.4c	...c	...c	...c	p7.8c	p7.5c	7.7	8.1	p7.3c	7.2	p6.8c	6.3	...
22	5.9	...c	...c	...c	...c	...c	...c	...c	6.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.4	7.6	7.8	7.6	7.7	7.1	7.3	7.6	7.5	5.0	...
24	4.2	4.2	4.0	3.4	3.2	3.1	3.3	5.7	6.8	7.4	7.2	7.0	6.8	7.3	7.3	7.6	7.3	7.0	7.0	5.9	6.3	5.7f	5.6f	5.2	5.8
25	6.3	5.8	5.5	5.1	4.2	4.0	4.1	6.4	7.5	7.7	6.7	6.5	6.1	6.3	5.6	6.7	6.5	6.8	7.3	5.7	5.7	5.6	5.7	5.4	6.0
26	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.9	8.0	7.7	7.3	7.0	6.7	6.5	7.4	7.2	7.2	6.3	5.6	6.2	6.6	5.6	...
27	4.8	4.3	4.2	3.5	2.5	2.0	2.9	5.6	6.5	7.6	6.8	6.1	5.6	5.8	p6.1c	5.6	6.1	6.3	6.0	5.6	p6.1c	6.6	5.7	6.1	5.4
28	...c	...c	...c	...c	...c	...c	...c	...c	...c	7.7	6.5	p6.3c	6.2	6.2	6.4	7.2	7.5	7.8	7.2	6.8	5.7	...f	...f	4.8f	...
29	4.6	4.5	4.7	4.3	3.9	3.5f	p3.9f	6.0	7.0	6.3	6.2	6.4	6.0	6.5	6.6	5.8	5.2	6.1	7.0	6.4	6.4j	6.5	5.6	5.4	5.6
30	5.6	5.8	...f	p4.8f	...f	...f	...f	5.4f	6.6	p7.2c	7.8	7.0	6.6	6.8	6.7	7.0	7.1	7.4	7.6	6.4	5.6j	6.9	7.7	6.1	...
31	3.1	2.4	1.6	1.4	1.5	1.3	2.5	5.1	6.2	6.3	6.1	6.6	7.0	6.8	6.7	6.6	6.6	7.3	7.5	6.4	6.7	p6.1c	5.6	4.9	5.1
MEDIAN*	5.6	5.0	4.6	3.8	3.2	2.8	3.1	5.6	6.8	7.3	6.9	6.9	6.7	6.8	6.9	7.1	7.1	7.0	7.1	6.6	6.4	6.6	6.0	5.6	5.9

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 364

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1945 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — JULY 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	240	250	290	290	290	290	270	240	320	320	350	360	390	460	350	400	240	250	290	310	360	370	260	240	310
2	250	260	260	250	280	310	300	240	220	...c	...c	...c	...c	...c	370	360	220	p270c	300	370	340	270	220	220	...
3	230	240	250	240	250	270	290	240	320	350	370	360	400	380	330	360	p230c	p250c	p280c	260	250	230	220	230	285
4	q250c	250	250	250	p260c	300	260	240	310	320	350	380	380	350	370	210	210	270	300	380	330	280	250	230	291
5	240	250	250	270	240	250	280	240	230	360	390	420	420	370	370	400	220	250	260	320	320	260	230	230	295
6	220	230	240	240	290	290	260	250	p300c	330	370	370	370	370	330	350	250	240	260a	270a	240	230	240	250	283
7	250	240	270	280	260	250	270	250	330	350	330	470	440	400	390	350	320	240	260	280	260	230	240	250	300
8	260	250	q290c	q290c	q250c	q230c	q240c	230	220	350	p360c	420	400	350	460h	300	220	260	280	280	240	230	230	240	287
9	230	250	240	230	230	250	290	250	220	320	360	200	430	370	350	350	210	p250c	260	270	250	250	230	220	271
10	210	230	230	230	240	250	280	240	300	p370c	360	400	450	450	290	370	210	250	240a	280	280	260	290	260	290
11	250	240	240	230	230	230	230	240	200	340	...c	...h	...c	...c	460	p370c	p250c	240	250	250	230	220	230	220	...
12	230	230	260	290	270	260	260	250	p300c	370	q400c	...c	...c	...c	520	...c	...c	...c	270	260	240	220	210	230	...
13	240	240	220	220	230	280	290	250	p300c	320	p360c	q390c	530	430	380	360	210	230	270	300	300j	q250c	230	240	295
14	230	230	230	240	250	300	260	230	220	340	400	390	400	380	390	330	300	250	290	350	320	300	250	240	297
15	220	240	230	230	230	250	280	240	230	330	350	410	440	400	410	210	210	250	290	360	370	310	240	220	290
16	220	220	230	230	230	260	290	p250c	p300c	340	350	400	400	450	350	400	220	250	280	310	310	280	240	220	293
17	220	210	220	230	260	290	300	240	330	360	360	380	380	400	370	210	210	250	250	240	240	250	240	230	278
18	230	240	250	270	260	280	290	240	230	330	340	340	380	220	330	400	390	260	290	320	320	260	250	260	291
19	250	230	240	250	240	250	290	p270c	q330c	370	370	450	380	450	220	430	390	240	250	300	310	270	250	240	303
20	220	230	230	240	260	290	290	250	310	340	360	430	410	400	370	p360c	p300c	240	270	290	260	220	220	220	292
21	230	230	220	240	270	290	280	240	230	320	320	400	350	...c	...c	...c	230	220	p250c	p250c	240	240	p220c	230	...
22	220	...c	...c	...c	...c	...c	...c	...c	330	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	380	370	210	260	260	270	260	260	220	230	...
24	240	220	230	260	290	270	290	240	220	360	360	370	400	400	380	210	210	250	290	330	320	270	230	230	286
25	220	240	260	250	260	260	260	240	350	360	400	470	430	540	430	410	220	250	280	320	290	260	230	220	310
26	240	230	250	270	260	260	260	270	240	350	370	390	380	410	340	450	370	240	280	280	280	270	220	220	297
27	230	230	230	250	260	260	270	240	220	350	380	430	420	450	p430c	420	220	250	280	290	250	230	220	220	293
28	...c	...c	...c	...c	...c	...c	...c	...c	...c	340	390	q390c	440	440	370	370	210	230	270	320	360	340	270	260	...
29	230	230	240	260	290	300	280	240	340	230	370	400	200	400	200	400	260	240	280	290	280	290	230	230	281
30	230	290	300	320	340	290	270	250	300	...c	380	390	220	350	420	330	210	250	270	360	300	250	200	220	...
31	250	240	290	320	330	370	290	250	230	390	390	420	370	400	400	410	220	...a	250	250	230	230	230	240	...
MEDIAN*	230	240	240	250	260	270	280	240	300	340	360	400	400	400	370	360	220	250	270	290	280	260	230	230	290

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 365

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JULY 1945

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION													MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.2	4.3	4.6	4.4	4.4	4.5	4.3	4.3	...	...	...	...	...	240	210	q220c	210	210	220	220	220	...	...	...
2	...	...	...	...c	...c	...c	...c	...c	4.3	4.2	...	...	...	...	...	...	...c	...c	...c	...c	...c	210	210	...	...	...
3	...	...	4.2	4.3	4.4	4.3	4.5	4.3	4.2	4.2	...	...	...	...	...	210	210	210	200	210	200	210	210	...	...	...
4	...	...	4.2	4.2	4.3	4.4	4.5	4.3	4.3	...	...	...	...	...	...	220	210	210	210	210	210	210	...	...	...	...
5	..	...	...	4.3	4.4	4.5	4.4	4.5	4.4	4.2	...	...	...	...	...	...	220	220	200	200	200	200	200	...	...	...
6	...	...	...c	4.3	4.4	4.5	4.5	4.4	4.2	4.5	...	...	...	...	...	...c	220	210	210	210	220	210	210	...	...	...
7	...	...	4.1	4.4	4.4	4.6	4.5	4.5	4.5	4.5	4.2	...	...	...	...	230	210	210	200	200	200	220	210	220	...	...
8	...	...	...	4.3	p4.6c	4.8	4.6	4.4	4.4	4.2	...	...	...	...	...	...	220	p220c	210	210	220	210	210	...	...	...
9	...	...	...	4.3	4.5	...	4.7	4.5	4.5	4.5	...	...	...	...	...	...	210	200	...	200	200	210	210	...	...	...
10	...	...	4.2	p4.6c	4.7	4.6	4.7	4.7	4.6	4.6	...	...	...	...	...	220	p220c	210	210	210	210	200	210	...	...	...
11	...	...	...	4.5	...c	...c	...c	...c	4.8	...c	...	...	...	...	...	...	...c	...c	...c	...c	...c	...c	...c	...	...	...
12	...	...	...c	4.5	...c	...	...c	...c	4.7	...	...	...	...	...	...	...c	200	...c	...c	...c	...c	...c	...c	...	...	...
13	...	...	...c	p4.7c	...c	p4.7c	5.1	4.7	4.5	4.4	...	...	...	...	...	...c	...c	...c	p210c	220	220	200	210	...	...	...
14	...	...	...	4.6	4.7	4.3	4.7	4.6	4.7	4.3	4.3	...	...	...	...	...	220	230	210	210	210	200	220	210	...	...
15	...	...	...	4.7	4.7	4.8	4.8	4.7	4.7	...	...	...	...	...	...	...	220	210	210	210	200	200	...	...	...	...
16	...	...	...c	p4.7c	4.7	4.8	4.3	4.8	4.6	5.0	...	...	...	...	...	...	220	210	200	210	200	210	210	...	...	...
17	...	...	4.5	4.8	4.7	4.8	4.7	4.9	4.7	...	...	...	...	...	...	220	220	210	220	210	200	200	...	...	...	...
18	...	...	...	4.7	4.6	4.9	4.8	...c	4.5	4.6	4.3	...	...	...	...	...	230	220	210	220	...	220	210	220	...	...
19	...	...	...c	4.6	4.7	5.1	4.7	5.0	...	4.8	4.7	...	...	...	...	...c	220	210	220	210	220	...	210	210	...	...
20	...	...	4.6	4.5	4.7	4.8	4.7	4.7	4.6	...c	...c	...	...	...	...	p220c	230	210	220	210	210	210	...c	...c	...	...
21	...	...	...	4.7	4.8	4.3	4.7	...c	...c	...c	...c	...	...	...	...	...	220	200	210	200	...c	...c	...c	...c	...	...
22	...	...	4.3	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...	...	230	...c	...c	...c	...c	...c	...c	...c	...c	...	...
23	...	...	...c	...c	...c	...c	...c	...c	4.5	4.4	...	...	...	...	...	...c	...c	...c	...c	...c	...c	200	210	...	...	...
24	...	...	...	4.3	4.1	4.7	4.6	4.6	4.5	...c	...	...	...	...	...	...	220	230	210	210	210	220	...	...	...	...
25	...	...	4.5	4.4	4.5	4.6	4.5	4.7	4.5	4.4	...	...	...	...	...	220	220	220	220	220	210	220	220	...	...	...
26	...	...	...	4.2	4.3	4.4	4.5	4.5	4.3	4.6	4.4	...	...	...	...	...c	220	220	220	210	200	220	210	210	...	...
27	...	...	...	4.2	4.3	4.6	4.4	4.3	p4.4c	4.3	...	...	...	...	...	...	220	220	200	200	200	p200c	210	...	...	...
28	...	...	...c	4.2	4.4	p4.4c	4.5	4.4	4.3	4.3	...	...	...	...	...	...c	220	210	p200c	220	210	210	210	...	...	...
29	...	...	4.2	...	4.3	4.4	...	4.3	...	4.3	...	...	...	...	...	230	...	230	210	...	200	...	210	...	...	...
30	...	...	4.3	p4.4c	4.5	4.5	...	4.4	4.4	4.2	...	...	...	...	...	230	...c	220	210	...	220	220	200	...	...	...
31	...	...	...	4.4	4.4	4.5	4.4	4.5	4.5	4.3	...	...	...	...	...	...	220	230	220	200	200	210	200	...	...	...
* MEDIAN	...	...	4.2	4.4	4.6	4.6	4.6	4.5	4.5	4.4	4.3	...	...	...	...	220	220	210	210	210	210	210	210	210	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 366

JULY 1945 JULY 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	1.5	1.7	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.2	1.0	1.1	2.0	3.1	2.9	...	3.3	...	...	...	3.1	2.6	1.9	...
2	...	1.2	1.7	...c	...c	...c	...c	...c	1.7	1.3	1.2	...c	...	...	2.6	2.7	...c	...c	...c	...c	...c	3.1	2.9	2.5	...c	...
3	1.2	1.2	1.3	1.7	1.7	1.8	1.7	1.7	1.7	1.7	p1.6c	...	...	1.3	2.1	2.9	3.3	...	3.3	...	...	...	3.0	p2.5c	...	...
4	...	1.2	1.4	1.7	1.7	1.8	1.8	1.8	1.8	1.7	1.3	1.2	1.0	...	2.1	2.7	3.0	...	...	3.5	3.3	3.3	3.0	2.6	2.0	...
5	1.0	1.1	1.3	1.3	1.8	1.8	1.8	1.8	1.8	1.7	1.2	1.0	...	1.0	2.1	2.7	...	...	...	...	...	...	2.9	2.5	1.9	...
6	...	1.1	p1.4c	1.7	1.7	1.8	1.8	1.8	1.7	1.7	1.7	1.2	...	...	2.2	...c	...	...	...	...	...	...	2.9	2.9	2.0	...
7	...	1.1	1.2	1.2	1.7	1.7	1.8	1.8	1.8	1.7	1.2	1.2	...	...	2.1	2.7	3.0	...	...	...	...	...	3.1	2.6	1.9	...
8	...	1.6	1.3	1.8	p2.0c	1.8	1.7	1.7	1.7	2.0	1.2	1.0	...	...	...c	2.7	3.0	...	...	...	...	3.4	...	...	...	...
9	...	1.2	1.2	1.5	1.7	1.7	1.8	1.8	1.8	1.8	1.3	...c	...	...	2.2	2.8	...	...	...	...	...	...	...	2.7	...c	1.3
10	1.0	1.2	1.4	p1.7c	1.8	1.8	1.8	1.9	1.8	1.8	1.2	1.2	...	1.0	2.3	2.7	...	...	...	...	...	...	...	2.6	1.9	...
11	...	1.0	1.2	1.7	1.9	1.8	1.9	1.8	1.8	1.8	1.4	1.3	...	...	2.2	2.8	...c	...c	...c	...c	...c	...c	...c	...c	2.1	1.2
12	...	1.0	p1.2c	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.3	1.0	...	2.0	...c	...	...	...c	...c	...c	...c	...c	...c	...c	...
13	0.9	1.1	1.3	p1.7c	1.7	1.9	1.8	1.9	1.8	1.5	1.3	1.2	1.0	1.0	2.1	...c	...	...	...	...	...	...	...	2.5	2.4	1.1
14	0.9	1.2	1.2	1.2	1.7	1.8	1.7	1.8	1.7	1.7	1.3	1.2	...	1.1	2.3	2.8	3.3	3.5	3.5	...	...	...	...	2.6	2.2	...
15	...	1.3	1.2	1.4	1.0	1.8	1.9	1.8	1.8	1.8	1.4	1.2	0.9	...	2.2	2.3	3.4	2.7	3.5	...	...	3.4	...	...	2.3	1.1
16	0.8	1.2	p1.3c	1.8	1.9	1.8	1.8	1.8	1.9	1.7	1.3	1.2	...	1.1	...c	...c	...	3.5	...	...	...	...	...	2.8	...	1.2
17	1.0	1.0	1.2	1.8	1.9	1.9	1.8	1.8	1.8	1.7	1.2	1.2	0.9	1.0	2.2	2.8	...	...	...	...	...	...	...	2.7	2.1	...
18	1.0	1.0	p1.8c	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.2	1.2	...	1.2	2.1	2.7	...	...	...	...	...	...	3.1	...	...	...
19	1.1	p1.7c	p1.7c	1.7	1.8	1.8	1.8	1.9	1.8	1.7	1.7	1.3	...	...	p2.0c	...c	...	...	...	...	...	...	...	2.7	2.3	...
20	...	1.3	p1.2c	1.7	1.8	2.0	1.9	1.8	2.0	1.7	p1.5c	1.2	...	...	2.3	...	...	...	...	...	...	...	...	...	2.1	1.1
21	1.2	1.2	1.2	1.3	1.7	2.0	2.1	...c	...c	...c	1.7	...c	...	1.2	2.3	2.3	...	...	...	...	...	...	...	...	...	...
22	...c	...c	1.3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...	...c	...c	...c	...c	...c	...c	...c	2.0	1.7	1.3	1.2	...	...c	...c	...c	...c	...c	...c	...c	...	...	...	2.7	2.2	1.2
24	...	1.2	1.3	1.7	1.8	1.8	1.8	p1.6c	...c	...c	...c	...c	...	...	1.9	2.7	3.0	...	...	...	...	...	3.2	2.7	2.2	1.1
25	...	1.2	1.2	1.3	1.9	2.1	2.1	2.1	2.1	1.9	1.8	1.3	...	...	2.4	2.7	3.1	...	...	...	...	...	...	...	2.2	...
26	...c	...c	...c	1.7	1.7	1.8	1.8	1.8	1.7	1.7	1.3	1.2	0.8	...	...c	...c	...	...	...	...	...	...	...	2.6	2.0	...
27	0.9	1.1	1.2	1.7	1.7	1.7	1.8	1.8	p1.8c	1.7	1.3	1.3	1.0	...	2.2	2.6	3.0	...	...	...	...	...	...	2.6	...f	...
28	...c	...c	...c	1.7	1.8	p1.8c	1.9	1.8	1.8	1.7	1.7	1.2	...	...c	...c	...c	...	...	...	...	...	...	...	2.5	...	1.1
29	0.9	1.0	1.2	1.4	1.9	1.8	1.8	1.8	1.8	1.2	1.2	1.1	1.0	...	2.2	2.6	...	...	3.5	...	...	...	...	2.6	...	1.0
30	...	1.1	1.4	p7.7	1.8	1.8	1.9	1.8	1.8	1.3	1.3	1.2	...	1.1	2.2	2.6	...c	...	3.5	...	...	...	3.0	2.7	2.2	...
31	...	0.9	1.2	1.3	1.7	1.8	1.8	1.8	1.8	1.7	1.3	1.3	...	...	2.1	2.7	3.0	...	...	...	...	...	3.0	2.6	...c	...
* MEDIAN	1.0	1.2	1.3	1.7	1.8	1.8	1.8	1.8	1.8	1.7	1.3	1.2	1.0	1.1	2.2	2.7	3.0	3.5	3.5	3.5	3.3	3.4	3.0	2.6	2.1	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 367

AUGUST 1945 | AUGUST 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	5.1	5.3	3.2	2.6	2.1	...a	3.0	5.4	6.6	6.9	6.6	6.3	6.5	6.5h	7.9	7.8	7.0	7.6	7.6	6.6	...f	...f	...f	...f	...
2	6.2	4.9	...f	4.0f	3.6	p3.0f	2.3	4.6	5.8	5.9	5.9	5.8	5.8h	6.1	6.2	6.0	6.2	6.5	6.3	p5.4c	4.8	5.1	5.6	5.4	...
3	4.7	5.1	4.9	3.5	3.2	2.4	2.6f	5.6	6.6	7.7	7.3	7.0	7.7	8.6	8.9	8.4	8.0	6.8	6.3	p5.5c	5.1f	...f	...f	...f	...
4	...f	...f	...f	p4.1f	p2.4f	2.1	3.0	5.9	6.9	7.9	7.6	7.2	6.6	6.8	6.6	7.0	7.2	7.3	7.6	p6.9c	6.1	5.8	6.6	6.3	...
5	5.0	5.0	4.9	4.3	3.3	2.2	3.0	5.8	7.1	7.0	6.5	.0	7.5	6.9	7.4	7.1	7.0	7.4	6.9	6.7	5.7	6.0	5.5	...f	...
6	...f	...f	5.4	4.2f	2.7	2.0	2.9	5.8	6.8	7.4	7.0	7.3	6.8	6.6	6.8	7.0	7.1	8.3	8.7	7.7	7.5	7.0	7.7	6.5	...
7	6.0	5.3	5.5	4.0	2.8	2.2	3.2	5.8	7.0	6.7	6.7	5.8	5.6	5.7	6.1	6.4	6.6	6.6	6.9	p6.3c	5.8	6.2	6.9	5.7	5.7
8	6.1	5.4	4.0	2.9	2.5	1.9	3.0	6.1	7.1	p6.8c	p6.5c	p6.4c	6.4	7.0	7.5h	7.8	7.0	8.5	9.6	8.0	7.1	7.8	7.7f	7.1f	6.3
9	6.8	6.4	6.3	4.5	2.0	1.2b	2.9	p5.1c	6.4	6.6	6.5	6.6	6.7	7.2	7.3	7.7	8.1	8.0	7.8	6.8	6.2f	6.7f	...f	...f	...
10	6.5	5.8	5.2	5.4	3.4	3.0	3.7	6.2	7.5	7.9	7.0h	6.5h	6.3	6.1	6.1	6.3	6.6	7.5	7.5	6.6	p5.6f	...f	...f	p5.0f	...
11	...f	5.7f	4.3	2.8	2.5	1.8	3.2	6.0	6.8	6.5	6.6	6.4	6.4	6.5	6.6	8.0j	7.5	7.5j	7.1	p7.2c	7.9	8.4	7.3	7.3	...
12	5.6	4.3	3.7	2.9	2.1	1.7	3.3	5.9	7.9	7.9	7.2	6.8	6.7	6.7	6.7	7.3	7.1	7.5	7.5	7.0	6.6	p6.2c	5.9	p5.9c	5.8
13	5.8	5.9	5.5	4.9	4.4	4.1	4.2	6.9	8.8	8.0	8.0h	7.7	7.3	8.0h	7.7	7.0	7.2	7.1	7.0	6.8	6.4	6.6	7.1	6.1	6.6
14	6.3	5.5	5.5	5.1	4.3f	...f	...f	...f	p8.4f	8.4	8.4h	8.1	8.5	8.3	7.4	7.3	7.4	7.8	7.7	7.3	6.4	6.5	7.0	7.1	...
15	6.1	5.7	4.7	3.5	2.9	2.0	3.2	6.3	7.4	7.4	7.8	8.1	8.2	8.9	9.0	8.4	9.4	8.7	8.0	7.0	...f	...f	8.0f	6.5	...
16	6.0	4.1	3.2	2.7	2.6	2.8	3.4	6.4	8.0	8.2	7.8	7.5	7.2	7.5	8.1	7.6	7.3	7.3	8.1	7.5	6.3	6.6	...f	...f	...
17	p5.2f	5.9	5.8	4.2	3.8	3.4	4.0	6.9	8.0	8.2	7.3	7.3h	7.2	7.4	7.5	7.5	7.9	8.0	7.4	6.5	6.9	7.5	7.0	...f	...
18	...f	...f	7.4f	7.1f	5.3	3.5f	4.0	6.6	7.9	7.6	7.1	7.2	7.4	7.0	7.1	7.6	8.0	7.8	7.5	6.6	6.4	6.2f	...f	7.4f	...
19	7.4	6.7	5.7	4.1	3.1	2.8	3.1	6.1	7.3	7.8	6.7	7.0	7.2	7.5	7.5	7.6	7.7	p7.8c	8.0	7.8	7.7	8.0	8.2	7.0	6.7
20	7.1	5.9	3.6	3.4	3.5	2.9	2.9	6.0	7.3	7.4	7.1	6.9	6.9	6.6	6.7	7.3	7.4	7.2	7.0	6.3	5.8	...f	...f	...f	...
21	5.5	5.6	...f	3.9f	3.1	3.3f	4.2f	7.2	7.8	p8.5c	9.2	8.3	8.4	7.4	8.7	8.5	8.6	9.0j	9.2	8.3	7.2	6.6f	...f	...f	...
22	p6.9f	7.5f	6.8f	3.8	2.8	2.2	3.2	6.1	7.4	7.4	6.9	6.6	6.9	7.5	7.1	7.7	8.0	7.6	7.7	...f	...f	...f	...f	6.6f	...
23	...f	5.5	6.0	4.9	4.9	3.9	4.6	p6.7c	7.8	7.8	7.0	6.7	7.0	6.8	7.1	7.1	6.7	7.4	7.7	8.0	6.6	7.3	6.5	6.2	...
24	6.6	7.0	6.4	5.6	4.5	4.1	4.7	6.8	7.8	8.1	7.6	6.9	6.7	7.0	6.6	7.4	7.2	7.0	7.0	6.4	p6.3c	6.5f	p7.3f	...f	...
25	5.9f	5.5	5.7	5.3	4.2	4.1	4.2h	5.8	6.9	7.5	7.3	7.0	6.4	6.2	6.5	6.6	6.0h	6.1	6.6	5.4	...f	...f	...f	...f	...
26	...f	6.5	5.1	4.7	4.6	p4.0f	3.3	5.8	6.9	7.6	7.8	7.3	6.5h	6.4h	6.9	7.1	7.2	7.5	7.3	6.6	...f	6.5	7.3	6.7	...
27	7.1	4.8	3.2	2.4	1.9	1.8	3.3	6.0	7.1	p6.6c	7.0	6.9	6.6	6.7	6.6	p6.2c	p6.8c	6.5	p6.8c	p5.8c	...f	...f	...f	...f	...
28	...f	...f	...f	...f	...f	...f	3.3f	6.8	8.3j	8.2	8.7	p7.9h	p7.8c	7.5	7.2	p7.4c	p7.9c	7.9	p7.6c	7.2	6.9	p7.1c	...f	...f	...
29	...f	...f	...f	...f	4.2f	p3.7f	4.0	6.6	p8.3c	8.1	8.5	7.6	7.6	7.5	7.8	7.8	7.7	7.5	7.8	7.2	6.5j	6.3j	6.2j	6.7	...
30	6.0	5.7	5.5	4.7	3.5f	2.6	3.8	6.1	7.1	p7.0c	6.9	p6.7c	p6.5c	p6.7c	p6.9c	p7.1c	p6.6c	p6.8c	p7.6c	p6.9c	p5.8c	p5.7c	p5.6c	p7.1c	6.0
31	p6.9c	...f	...f	5.2c	4.2c	2.5	3.8	6.4	6.5	p7.5c	6.7	7.1	6.5	6.6	6.5	7.2	7.3	7.7	7.5	7.3j	7.1	7.1	6.8	7.0	...
MEDIAN*	6.1	5.6	5.4	4.1	3.2	2.6	3.3	6.1	7.3	7.6	7.1	7.0	6.8	6.9	7.1	7.3	7.2	7.5	7.5	6.8	6.4	6.6	7.0	6.6	6.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 368

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

AUGUST 1945 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — AUGUST 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	230	220	240	250	270	...a	250	240	310	350	350	390	440	400	390	330	200	240	...a	310	310	370	240	230	...
2	230	240	260	260	270	280	320	240	220	400	220	440	480	430	440	350	210	220	270	320	300	280	240	220	298
3	240	230	220	250	240	320	260	240	230	340	330	340	360	380	390	370	390	220	290	320	340	340	300	230	299
4	250	250	230	220	260	240	270	240	310	330	350	430	420	390	400	390	330	240	...a	230	250	240	240	220	...
5	230	230	240	240	240	270	270	230	350	350	390	430	200	430	410	350	210	250	270	290	290	290	300	330	295
6	280	260	220	230	230	240	270	240	230	360	390	400	400	430	400	360	210	250	260	250	260	240	240	220	286
7	230	240	220	230	250	280	290	240	230	400	400	380	540	500	470	220	220	240	280	330	280	260	230	230	300
8	220	210	210	240	260	290	270	240	310	p340c	340	p390c	200	390	380	380	230	240	260	290	290	280	270	240	282
9	230	240	230	220	250	300	290	p240c	220	390	400	410	470	420	430	200	220	230	280	330	330	300	270	250	298
10	230	220	220	230	240	270	280	250	320	380	340	430	430	440	210	210	220	230	270	340	330	250	210	220	282
11	220	220	220	240	230	260	290	230	230	390	390	410	450	500	420	390	200	240	300	320	300	250	250	240	300
12	230	240	240	240	270	290	270	240	290	340	400	410	450	430	200	390	210	240	270	330	300	260	220	230	291
13	230	240	230	240	260	290	260	240	290	360	380	400	370	400	380	380	220	250	290	370	330a	250	230	230	297
14	230	230	230	300	360	290	250	240	300	240	320	350	390	410	350	220	230	250	290	340	350	290	230	220	288
15	230	230	230	220	240	290	290	240	340	330	390	390	360	370	360	300	220	250	300	340f	310	280	240	240	287
16	230	240	240	260	280	290	290	250	230	340	360	380	420	420	390	320	200	260	300	350	330	260	250	240	297
17	230	220	220	230	240	240	260	240	240	330	350	400	390	400	400	210	...b	250	300	350	330	300	260	260	...
18	280	250	230	220	230	240	260	240	330	360	410	400	430	420	400	220	220	260	290	340	340	310	240	220	298
19	220	230	230	230	250	280	280	230	230	350	340	430	420	410	400	370	p210c	p250c	280	300	270	250	230	230	288
20	230	220	230	240	240	250	280	230	230	370	380	410	420	210	420	350	220	240	280	300	320	310	250	240	286
21	230	230	240	230	250	250	260	240	310	p320c	340	360	380	380	380	210	220	240	260	300	310	300	250	230	280
22	230	220	210	230	250	260	270	240	310	320	370	430	470	390	340	320	200	260	310	340	240	280	240	230a	291
23	280a	270a	250a	300a	240a	260	280	240	230	370	380	390	420	360	370	430	230	240	260	250	250	250	240	230	288
24	230	230	230	240	250	280	270	240	310	350	360	400	410	400	380	380	200	250	270	280	290a	280a	250a	260	293
25	230	240	240	250	260	270	270	230	340	350	360	400	430	420	420	210	200	240	280	340	330	300	230	220	295
26	230	220	250	260	280	320	270	230	320	340	360	370	360	480	390	350	200	230	...a	290	290	240	240	230	...
27	230	230	240	240	...b	300	260	240	310	360	380	410	430	420	430	370	340	240	290a	360	290	240	340	400	...
28	370	290	290	290	270	270	270	240	230	320	370	390	380	380	380	340	340	240	260	320	320	300	310	310	312
29	260	230	220	220	230	240	260	240	300	350	330	370	420	370	410	220	220	240	260	290	260	260	240	230	279
30	220	230	220	240	230	250	270	240	330	340	360	p380c	390	p360c	p330	200	230	230	240	q270c	270	240	230	240	273
31	230	260	230	240	220	230	230	220	320	330	360	390	390	410	410	390	230	240	250	250	270	240	240	260	286
MEDIAN*	230	230	230	240	250	280	270	240	300	350	370	400	420	410	390	350	220	240	260	320	300	280	240	230	295

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 369

AUGUST 1945 AUGUST 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.4	4.3	4.3	4.5	4.5	4.4	4.3	4.2	...	...	...
2	...	...	...	4.4	...	4.5	4.5	4.4	4.5	4.3	...	...	...
3	...	...	...	4.5	4.4	4.4	4.5	4.5	4.4	4.3	4.6	...	...
4	...	...	4.2	4.3	4.5	4.5	4.6	4.5	4.4	4.4	4.3	...	...
5	...	...	4.3	4.3	4.5	4.6	...	4.6	4.5	4.4	...	...	...
6	...	...	...	4.5	4.7	4.7	4.7	4.7	4.7	4.4	...	...	...
7	...	...	...	4.6	4.6	4.6	4.7	4.7	4.7h	...	...	...	...
8	...	...	4.5	p4.5c	4.5	p4.6c	p4.7c	4.5	4.6	4.4	...	...	...
9	...	...	...	4.6	4.7	4.6	4.7	4.6	4.7	...	...	...	...
10	...	...	4.5	4.7	4.7	4.6	4.7	4.6	...	...	...	...	...
11	...	...	...	4.5	4.7	4.8	4.8	4.9	4.8	4.5	...	...	...
12	...	...	4.6	4.6	4.7	4.8	4.7	4.7	...	4.6	...	...	...
13	...	...	4.7	5.1	4.8	4.8	4.9	5.0	4.7	p4.7c	...	...	...
14	...	...	4.8	...	4.8	4.8	4.8	4.8	4.7	...	...	...	...
15	...	...	4.7	4.6	4.9	4.9	4.8	4.9	4.7	4.4	...	...	...
16	...	...	...	4.6	4.8	4.8	4.9	4.9	4.7	4.3	...	...	...
17	...	...	...	4.6	4.8	4.8	4.8	4.8	4.8	...	...	...	...
18	...	...	4.6	4.6	4.9	4.7	4.8	4.8	4.8	...	...	...	...
19	...	...	...	4.6	4.7	4.8	5.0	4.8	4.8	4.5	...	...	...
20	...	...	...	4.9	4.6	4.6	4.7	...	4.6	4.5	...	...	...
21	...	...	4.5	p4.5c	4.6	4.6	4.7	4.6	4.6	...	...	...	...
22	...	...	4.3	4.3	4.6	4.7	4.6	4.5	4.4	4.3	...	...	...
23	...	...	...	4.5	4.5	4.6	4.6	4.4	4.7	4.5	...	...	...
24	...	...	4.3	4.3	4.5	4.7	4.6	4.5	4.3	4.4	...	...	...
25	...	...	4.3	4.4	4.5	4.6	4.5	4.4	4.4	...	...	...	...
26	...	...	4.3	4.4	4.4	4.4	4.4	4.6	4.3	4.2	...	...	...
27	...	...	4.3	4.3	4.4	4.5	4.5	4.5	4.4	4.3	4.1	...	...
28	...	...	...	4.3	4.5	4.6	4.6	4.4	4.4	4.4	4.4	...	...
29	...	...	4.3	4.3	4.3	4.5	4.6	4.5	4.7	...	...	...	...
30	...	...	4.2	4.5	4.5	...c	...c	...	...	...	...	...	...
31	...	...	4.5	4.3	4.4	4.5	4.5	4.5	4.6	4.3	...	...	...
MEDIAN*	...	...	4.4	4.5	4.6	4.6	4.7	4.6	4.6	4.4	4.4	...	...

MINIMUM VIRTUAL HEIGHT OF F1 REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	210	200	200	200	200	210	...	...	...
2	...	...	...	220	...	210	210	200	200	200	...	...	...
3	...	...	...	220	220	210	210	200	200	200	210	...	...
4	...	...	240	220	210	210	200	200	200	200	210	...	...
5	...	...	220	230	210	210	...	210	200	210	...	...	...
6	...	...	...	240	220	210	220	210	220	200	...	...	...
7	...	...	...	220	210	200	200	190	210	...	...	...	...
8	...	...	220	p230c	230	p220c	p210c	200	210	210	...	...	...
9	...	...	...	230	210	210	220	200	200	...	...	...	...
10	...	...	240	230	220	220	210	200	...	...	...	...	...
11	...	...	...	220	210	200	200	210	210	200	...	...	...
12	...	...	220	210	220	210	200	200	...	210	...	...	...
13	...	...	230	230	210	220	200	220	210	210	...	...	...
14	...	...	230	...	230	220	210	200	220	...	...	...	...
15	...	...	240	220	230	220	220	220	210	220	...	...	...
16	...	...	...	220	220	220	210	210	210	220	...	...	...
17	...	...	...	220	210	210	200	210	200	...	...	...	...
18	...	...	230	220	210	210	200	200	210	...	...	...	...
19	...	...	...	220	210	220	210	200	210	210	...	...	...
20	...	...	...	210	210	210	210	...	210	200	...	...	...
21	...	...	230	p200a	210	210	210	210	210	...	...	...	...
22	...	...	230	230	220	220	220	210	210	210	...	...	...
23	...	...	...	230	220	210	210	200	200	210	...	...	...
24	...	...	230	220	210	210	210	200	200	200	...	...	...
25	...	...	230	220	220	210	200	220	210	...	...	...	...
26	...	...	230	230	220	210	200	200	210	210	...	...	...
27	...	...	220	220	220	220	210	200	210	220	210	...	...
28	...	...	...	230	210	220	210	210	210	210	220	...	...
29	...	...	220	230	220	220	210	210	210	...	...	...	...
30	...	...	220	220	220	p220c	p210c	q210c	210	...	...	...	...
31	...	...	220	210	220	220	200	200	200	200	...	...	...
MEDIAN*	...	...	230	220	220	210	210	200	210	210	210	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 370

AUGUST 1945 — AUGUST 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	1.3	1.3	1.7	1.9	1.8	1.9	1.8	1.8	1.8	1.7	1.3	1.0	...	2.1	2.7	3.2	...	...	...	...	...	...	2.7	...	...
2	...	1.2	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.5	1.2	...	...	2.4f	2.6	...	...	...	...	...	3.3	3.0	2.6	...	...
3	0.9	1.2	1.3	1.5	1.8	1.9	2.0	1.9	1.9	1.5	1.3	1.2	...	...	2.2	3.0	...	...	...	...	...	3.4	...	2.7	...	1.0
4	1.1	1.2	1.7	1.7	1.9	1.9	1.8	1.9	1.8	1.8	1.5	1.3	1.0	...	2.3	3.0	...	...	...	...	...	...	3.0	2.7	...	...a
5	1.1	1.2	1.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	2.3	2.7	...	...	...	...	...	...	3.1	2.6	2.1	1.2
6	0.9	0.9	1.3	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.7	1.2	0.9	1.3	2.4	2.9	...	3.6	...	...	3.7	...	...	2.7	2.5	...
7	0.9	1.2	1.3	1.7	1.8	1.8	1.8	1.8	1.8	1.7	1.4	1.2	1.1	1.3	2.2	2.8	...	...	...	...	...	3.5	...	2.8	2.1	...
8	0.9	1.0	1.3	p1.7c	1.7	p1.8c	1.9	1.8	1.8	1.8	1.2	1.2	...	...	2.4	3.0	...	3.4	...	...	...	...	...	2.9	2.2	1.3
9	1.0	p1.1c	1.2	1.8	1.8	1.9	1.9	1.9	2.0	2.0	1.8	1.7	...	1.2	...	2.8	...	...	...	...	...	...	3.3	2.8	2.2	1.1
10	...	1.2	1.3	1.8	1.8	1.9	1.9	1.8	1.9	1.8	1.3	1.2	1.0	...	2.3	2.9	...	...	...	...	...	...	...	2.3	2.3	1.2
11	1.1	1.0	1.2	1.8	1.8	1.8	1.8	2.0	1.9	1.8	1.4	1.3	1.2	1.3	2.3	2.9	...	...	...	...	...	...	...	2.7	2.3	1.2
12	1.2	1.2	1.3	1.8	1.8	2.0	1.9	1.9	1.8	1.8	1.7	1.3	...	1.4	2.3	2.9	...	...	...	...	...	...	2.8	2.3	1.1	...
13	...	0.9	1.8	1.8	1.9	2.0	2.0	2.0	1.9	1.6	1.7	1.3	1.0	1.0	2.4	2.9	3.4	3.5	...	3.8	...	...	...	2.8	2.2	1.2
14	1.1	1.3	1.8	1.8	1.8	1.9	1.8	1.8	1.9	1.8	1.7	1.3	...	1.4	2.4	2.9	...	...	...	...	...	...	...	2.7	2.4	1.2
15	1.0	1.0	1.2	1.7	1.8	1.8	2.0	1.9	1.8	1.8	1.3	1.2	...	1.3	2.4	3.0	...	...	...	...	3.8	3.7	3.3	2.8	2.5	1.1
16	0.9	1.2	1.4	1.8	1.8	1.8	2.0	1.9	1.8	1.8	1.4	1.2	...	...	2.4	2.9	3.4	...	...	...	...	...	...	2.7	2.3	1.0
17	1.1	1.2	1.3	1.7	1.8	1.9	1.8	1.9	1.9	1.9	...j	1.7	...	1.2	2.3	2.9	...	...	3.7	...	...	...	...	...b	2.3	1.3
18	1.2	1.2	1.4	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.7	1.3	...	1.3	2.4	2.9	3.3	3.6	...	...	...	3.9	...	2.9	2.3	1.0
19	1.0	1.3	1.4	1.8	1.9	2.0	2.0	2.0	1.9	1.8	p1.9c	...c	...	1.4	2.3	2.8	...	...	...	...	...	3.7	...	p2.9c	...c	...
20	1.1	1.3	1.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.4	...	1.4	2.4	2.8	...	...	...	...	...	3.6	...	2.8	...f	1.1
21	...	1.3	1.2	p1.9c	1.8	p2.1c	1.9	1.9	1.9	1.8	1.9	1.2	...	1.3	2.4	2.9	p3.4c	3.5	...	...	...	...	...	...	2.2	...
22	1.0	1.2	1.6	1.8	1.9	1.9	2.0	1.9	1.9	1.8	1.8	1.3	...	1.3	2.4	2.9	...	3.4	...	...	...	3.6	3.4	2.7	2.2	1.2
23	1.1	1.3	1.8	1.7	1.8	1.9	1.8	1.9	1.8	1.7	1.4	1.3	1.2	1.3	2.3	2.8	3.3	...	...	3.6	3.6	...	3.3	3.0	2.3	...
24	1.0	1.2	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.2	...	1.3	2.3	2.8	...	...	...	...	...	...	...	2.7	2.3	...
25	1.1	1.2	1.7	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.4	1.2	...	1.3	2.3	2.8	...	...	...	...	...	...	...	2.6	2.3	...
26	1.1	1.3	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.4	1.3	...h	1.3	2.3	2.9	...	3.4	...	...	3.5	...	...	2.6	2.2	...a
27	1.1	1.2	1.3	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.2	1.0	...	2.4	2.8	...	...	...	...	3.5	...	...	2.7	2.4	...
28	0.9	1.2	1.7	1.4	1.7	2.0	1.9	1.8	1.8	1.8	1.4	1.2	...	1.4	2.3	2.7	...	...	...	...	...	...	3.1	2.6	2.3f	1.1
29	0.9	1.3	1.3	1.4	1.8	1.8	1.9	1.9	1.9	1.8	1.5	1.3	...	1.4	2.3	2.9	...	...	...	...	...	...	...	2.6	2.0	1.1
30	1.1	1.2	1.3	2.0	1.9	...c	...c	...c	2.0	2.0	1.8	1.4	...	1.5	2.3	2.8	...	...	...	...c	...c	...c	...	...	2.1	p1.1c
31	...	1.3	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.3	1.2	...	1.4	2.3	...	...	...	...	3.6	3.6	3.4	...	2.9	2.3	...
MEDIAN*	1.1	1.2	1.3	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.5	1.3	1.0	1.3	2.3	2.9	3.4	3.5	3.7	3.6	3.6	3.6	3.1	2.7	2.3	1.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 371

SEPTEMBER 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1945

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.0	6.3	5.5	5.0	3.9	2.9	4.1	6.2	7.3	7.8	7.4	6.8	6.6	7.1	6.7	6.9	7.0	6.9	7.3	p6.1c	5.5	5.4	6.2	...f	...
2	5.4f	p5.1f	...f	p3.9f	2.5	3.2	4.3	6.3	7.1	7.2	7.3	6.6	7.4	7.1	7.5	7.7	7.5	8.1	8.8	5.0	7.8	7.5	7.0	7.0	...
3	6.5	5.6	4.3	3.8	3.6	3.4	...c	...c	...c	p7.1c	p7..c	6.9	6.7	6.8	6.9	7.2	7.0	7.0	6.9	5.8	[illegible]	...f	...f	6.3f	...
4	5.7	5.5	4.7f	3.1	2.0	....	3.8	6.3	7.0	7.6	7.0	7.4	7.1	7.2	7.4	7.9	7.5	p7.3c	p7.0c	6.8	5.7f	...f	...f	...f	...
5	p6.3f	5.2f	...f	...f	p4.1f	3.6f	4.2f	6.2	7.1	6.7	6.5	6.7	6.5	6.4	6.9	7.2	7.4	7.3	7.2	5.6	6.3	6.5	6.3	5.9	...
6	6.5	p5.0f	4.9	4.0	3.2	2.6	4.0	6.8	7.7	7.9	7.9	7.4	7.6	8.0	p6.1c	p8.2c	6.3	8.1	8..	7.0	...f	...f	...f	7.1	...
7	7.2	6.7	5.1	4.2	3.7	2.9	4.0	7.3	6.5	3.8	7.5	7.5	7.5	7.7	5.2	8.5	8.4	8.7	8.7	7.8	...f	...f	p8.5f	...f	...
8	...f	...f	p5.6f	4.0	3.0f	2.8f	4.5	7.4	6.5	7.4	6.6	6.2	6.4	6.7	7.1	7.4	7.6	7.9	6.4	7.8	7.8	6.4	6.3	6.5	...
9	5.3	4.8	3.8	2.9	2.5	2.5	4.8	7.4	7.9	8.5	8.0	7.9	p7.4c	...c	...c	...c	9.1	9.3	8.8	8.4	7.5	...f	7.6	8.1	...
10	p7.6f	...f	4.5	3.9	4.0	3.5	4.5	7.0	8.1	8.5	7.7	7.7	7.4	7.4	7.3	7.0	8.4	8.4	8.4	8.1	8.0	7.6	7.7	...f	...
11	7.5	7.6	6.7	p5.5f	p4.9f	p4.2f	...f	8.0	8.5	8.4	8.4	7.8	7.5	7.2	7.1	p7.4c	...c	...c	...c	8.4	8.3	7.8	8.0	7.7	...
12	8.0	6.9	5.9	5.6f	...f	p4.7f	5.7	7.9	8.7	8.7	7.9	7.6	7.1	7.2	7.3	7.6	7.9	8.2	8.2	7.3	...f	...f	7.5f	...f	...
13	...f	p5.5f	5.2	4.3f	3.2	2.9	5.0	7.3	7.4	8.1	8.1	p8.0c	7.8	7.6	5.1	8.3	8.4	8.5	8.8	...c	...c	...c	...c	...c	...
14	...c	...c	...c	...c	...c	...c	...c	7.2	8.1	8.5	8.1	7.7	7.2	7.0	7.1	7.2	7.4	7.6	8.0	7.2	...f	...f	7.6	7.8	...
15	7.8	7.1	5.6	4.9	3.7	2.8	5.0	6.8	7.9	7.7	7.5	7.3	7.6	8.1	8.4	8.4	8.5	8.5	8.3	7.6	...f	...f	9.1	...f	...
16	8.4f	p6.8f	p5.5f	4.3	3.4	2.8	5.1	6.9	7.7	8.8	9.0	8.9	8.5	8.5	8.5	8.5	8.4	8.4	8.0	...f	...f	...f	...f	...f	...
17	...f	6.3	5.6f	p6.3f	p5.6f	p4.7f	6.1f	8.1	9.4	10.2	10.1	10.0	9.3	9.1	9.4	9.7	9.3	8.3	p7.9c	p7.6a	7.4a	7.1a	6.7a	6.6	...
18	7.3	...f	p7.3f	5.8	4.8	4.4	p6.0c	8.1	8.8	9.6	9.0h	8.2	8.7	10.2	11.3	12.1c	11.2	10.4	8.2	7.8	7.7	8.5	7.8	7.6	...
19	7.4	6.0	4.5	3.5	2.6	2.5	4.9	7.6	8.9	9.0	8.5	8.7	9.5	9.9	10.4	10.5	10.3	10.1c	8.0	8.2	8.0f	...f	8.5	9.8	...
20	9.2	8.0	7.2	6.6	5.5	5.1	6.5	7.5	8.0	7.5	7.2	7.4	8.0	8.1	9.5	9.7	10.4	10.0	p9.4c	p8.5c	8.1f	...f	...f	...f	...
21	8.8f	8.4f	6.9f	5.3f	...f	3.7f	4.8f	7.1	7.8	7.0	6.5	6.7	7.5	7.5	7.0	8.1	8.4	8.5	8.6	8.1	...f	8.0	...f	p8.6f	...
22	...f	p6.4f	5.0f	3.6	3.2	2.9	5.2	7.6	9.0	9.2	p8.3c	7.8	p8.2c	8.5	9.0j	9.5	10.3	9.6	9.4	p8.1f	...f	...f	...f	9.5	...
23	8.5	6.0	3.8	2.4	1.5b	p1.2b	5.0	7.7	9.4	9.3h	7.8	p7.6c	7.6	8.3	9.0	9.2	9.1	9.2	9.0	8.0	...f	...f	...f	...f	...
24	...f	...f	p4.4f	p3.1f	...f	1.6f	5.2	7.1	8.3	8.9	8.3	7.4	7.1	7.1	7.6	7.8	7.9	8.4	8.4	...f	...f	...f	...f	7.7	...
25	7.8	6.7c	5.5c	p4.1c	2.7f	2.3f	5.1	7.8	8.1	9.0	7.4h	7.3	6.7c	6.7	7.2	7.9	...c	...c	...c	8.2	...f	...f	...f	8.5	...
26	7.7	6.4	...c	...c	...c	...c	...c	...c	...c	9.1	7.5	6.8	7.0	7.2	7.3	8.1	8.3c	8.9	9.3	p8.8c	...f	...f	p8.8f	9.7	...
27	8.7	...f	...f	...f	...c	...c	...c	...c	...c	9.8	10.2	9.4h	7.6	7.6	p7.8c	8.0	8.1	8.5c	p9.4c	8.2	...f	...f	8.0f	8.7	...
28	...f	8.2	6.9	5.4	4.3	3.7f	6.0f	8.1	9.2	9.8	10.3	10.2	10.8h	10.1	9.7	10.6	10.3	9.0	8.3	p7.8c	...f	...f	...f	...f	...
29	...f	...f	...f	...f	3.2f	3.1f	5.3	7.5	8.5f	9.4f	9.6	9.9	8.5	9.0	9.0	9.2	9.2	9.1	p8.8c	8.2	...f	...f	...f	...f	...
30	...f	...f	...f	2.9f	2.4f	2.6f	5.8	7.5	8.6	10.2	10.2	9.0	8.4	...c	...c	...c	...c	p9.2c	9.2	p8.9f	p8.5c	...f	...f	9.5	...
31																									
MEDIAN*	7.5	6.4	5.5	4.1	3.5	2.9	5.0	7.4	8.1	8.6	7.8	7.6	7.5	7.6	7.6	8.1	8.4	8.5	8.4	8.0	7.8	7.6	7.8	7.8	7.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 372

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1945

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	250	250a	250a	230a	240	250	260	240	320	330	380	400	430	420	390	390	210	240	280	300	330	280	270a	270a	300
2	230	230	230	240	250	250	260	240	340	370	360	360	460	390	370	370	330	240	260	300	270	220	230	230	293
3	220	230	230	240	260	280	...c	...c	...c	p360c	p370c	400	440	470	400	370	230	250	280	350	400	280	240	230	...
4	230	230	210	240	300	520b	280	240	340	360	390	370	370	460	360	360	220	p250c	280	340	370	240	250	250	311
5	240	240	240	250	260	270	270	240	340	390	390	400	420	420	380	200	200	250	290	360	330f	250	230	240	296
6	230	230	230	230	260	300	260	250	310	360	370	390	360	420	p370c	p330c	230	250	290	390	340	250	230	220	296
7	230	230	240	240	240	250	260	240	320	340	380	400	420	380	360	360	210	250	290	340	320	240	240	210	291
8	230	230	220	230	250	250	260	230	220	370	420	400	410	360h	370	200	210	250	280	300	270	250	220	230	278
9	230	230	230	250	260	280	250	240	350	340	340	340	...c	...c	...c	...c	220	260	290	360	350	260	250	230	...
10	220	220	240	240	270	290	270	230	230	360	390	390	370	430	370	200	200	240	280	320	300	260	240	250	284
11	240	240	230	250	280	290	250	240	310	230	370	400	390	400	400	p380c	250	p260c	270	280	300	280	220	210	290
12	240	230	250	250	260	260	260	230	320	340	380	380	370	390	390	340	220	260	280	370	280	260	230	240	293
13	230	240	240	230	240	250	250	240	290	320	350	p380c	390	380	400	330	200	250	280	...c	...c	...c	...c	...c	...
14	250	240	230	240	250	p250c	p240c	230	230	340	360	400	420	410	390	340	200	260	300	350	340	380	220	230	296
15	230	230	240	220	240	260	250	220	330	340	420	390	400	390	360	200	220	250	280	330	360	280	230	220	287
16	230	240	230	250	250	270	260	230	300	320	340	350	360h	370	380	210	200	240	270	380	330	240h	220	230	258
17	220	240	280	270	260	240	260	230	230	320	330	350	330	330	320	220	210	270	270	300a	300	310	280	250a	276
18	260	240	230	230	270	270	260	230	220	330	330	360	350	340	320	210	210	260	270	280a	280a	240a	230	220	268
19	220	220	230	240	280	300	250	230	230	300	340	330	340	340	320	320	200	240	270	330	310	290	240	220	275
20	230	240	240	250	260	270	260	240	230	270	350	390	380	330	320	290	230	250	280	330	320	310	300	260	282
21	250	240	230	250	250	260	260	240	220	360	390	400	370	350	340	210	250	250	280	340	340	280	280	240	287
22	210	230	220	250	290	270	240	240	220	330	380	380	p360c	340	330	200	230	250	290	360	310	290	230	210	278
23	220	210	230	260	280	330	260	230	230	330	360	p400c	350	380	330	310	220	250	280	370	340	280	270	250	290
24	230	220	240	230	250	270	260	230	300	310	380	380	380	420	410	330	210	260	270	330	330	330	270	270	296
25	250	250	240	240	240	270	240	240	310	320	400	420	400	210	370	210	...c	...c	...c	330	330	320	240	230	...
26	230	250	...c	...c	...c	...c	...c	...c	...c	340	370	380	420	210	370	230	q230c	260	280	310	330	320	230	230	...
27	250a	270	270	320	...c	...c	...c	...c	...c	320	350	360	370	390	p340c	200	230	260	280	360	380	260	230	210	...
28	230	230	230	260	260	250	250	230	290	320	340	350	350	340	320	340	220	250	300	360	350	270	250	240	285
29	240	240	230	240	270	300	250	240	280	330	340	380	370	380	340	220	210	250	280	340	290	290	330	310	290
30	290	240	240	250	290	290	250	250	310	320	330	330	340	...c	...c	...c	...c	p270c	300	400	360	360	300	270	...
31																									
*MEDIAN	230	240	230	240	260	270	260	240	300	330	370	380	370	380	370	300	220	250	280	340	330	280	240	230	289

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 373

SEPTEMBER 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1945

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	4.2	4.4	4.6	4.7	4.7	4.6	4.4	4.3	...	...	...
2	...	...	4.6	4.5	4.5	p4.6a	4.7	4.5	4.5	4.6	4.2	...	...
3	...	...	...c	p4.5c	p4.5c	4.7	4.7	4.7	4.5	q4.4b	...	...	...
4	...	...	4.6	4.5	4.6	4.6	4.7	4.8	4.6	4.3	...c	...	...
5	...	...	4.4	4.5	4.7	4.7	4.6	4.6	4.5	...	...	...	...
6	...	...	4.5	4.7	4.7	4.7	4.7	4.8	...c	...c	...	...	...
7	...	...	4.6	4.7	4.7	4.9	4.8	4.7	4.5	4.7	...	...	...
8	...	...	...	4.7	4.7	4.8	4.7	4.6	4.6	...	...	...	...
9	...	...	4.7	4.8	4.7	4.7	...c	...c	...c	...c	...	...	...
10	...	...	...	4.6	4.7	4.8	4.7	4.9	4.7	...	...	...	...
11	...	...	...	4.5	4.8	4.7	4.7	4.7	4.8	...c	...	...	...
12	...	...	4.6	4.6	4.8	4.7	4.7	4.7	4.7	4.4	...	...	...
13	...	...	4.6	4.5	4.5	p4.6c	4.7	4.7	p4.6c	4.5	...	...	...
14	...	...	...	4.5	4.7	4.7	4.7	4.7	4.6	4.4	...	...	...
15	...	...	4.5	4.5	4.8	4.7	4.7	4.7	4.6	...	...	...	...
16	...	...	4.6	4.6	4.6	4.7	p4.7a	4.9	4.7	...	...	...	...
17	...	...	...	4.8	5.3	4.8	4.8	4.7	4.6	...	...	...	...
18	...	...	...	4.6	4.8	4.7	4.8	4.8	4.5	...	...	...	...
19	...	...	...	4.6	4.8	4.7	4.8	4.7	4.5	4.6	...	...	...
20	...	...	...	...	4.7	4.8	4.8	4.7	4.5	4.3	...	...	...
21	...	...	...	4.6	4.7	4.7	4.7	4.6	4.5	...	...	...	...
22	...	...	...	4.6	p4.7c	4.7	4.7	4.7	4.7	...	...	...	...
23	...	...	...	4.6	4.8	p5.0c	4.8	4.8	p4.7h	4.4	...	...	...
24	...	...	4.3	4.5	4.8	4.7	4.6	4.9	4.8	4.4	...	...	...
25	...	...	4.5	4.4	4.9	4.8	4.7	p4.8c	4.8	...c	...	...	...
26	...	...	...c	p4.7h	4.8	4.8	4.7	...	4.8	...	...	...	...
27	...	...	...c	4.6	4.7	4.9	4.8	4.8	p4.6c	...	...	...	...
28	...	...	4.5	4.8	4.8	4.9	4.9	4.7	4.7	4.8	...	...	...
29	...	...	4.5	4.7	4.8	4.8	4.9	4.8	4.7	...	...	...	...
30	...	...	4.6	4.7	4.7	4.7	4.9	...c	...c	...c	...	...	...
31													
MEDIAN*	...	...	4.6	4.6	4.7	4.7	4.7	4.7	4.6	4.4	4.2	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	220	210	210	200	200	220	210	...	...	...
2	...	...	210	220	220	200	190	220	210	200	230	...	...
3	...	...	...c	p220c	p220c	210	200	210	210	...b	...	...	...
4	...	...	230	230	220	200	200	210	200	220	...	...	...
5	...	...	230	220	220	200	220	210	210	...	...	...	...
6	...	...	230	230	220	220	210	210	...c	...c	...	...	...
7	...	...	220	220	220	200	200	200	200	210	...	...	...
8	...	...	...	230	200	200	210	200	200	...	...	...	...
9	...	...	230	220	230	200	...c	...c	...c	...c	...	...	...
10	...	...	...	230	220	220	210	210	210	...	...	...	...
11	...	...	...	230	220	200	200	200	200	200	...	...	...
12	...	...	230	230	220	220	210	200	200	210	...	...	...
13	...	...	230	220	220	p220c	210	210	210	210	...	...	...
14	...	...	...	240	220	230	210	210	210	210	...	...	...
15	...	...	220	230	220	220	200	210	210	...	...	...	...
16	...	...	230	220	210	210	200	210	210	...	...	...	...
17	...	...	...	230	210	220	200	200	220	...	...	...	...
18	...	...	...	230	230	210	210	220	210	...	...	...	...
19	...	...	...	220	210	210	220	220	210	220	...	...	...
20	...	...	...	...	210	200	220	210	200	200	...	...	...
21	...	...	...	210	200	210	200	200	200	...	...	...	...
22	...	...	...	220	220	...c	200	200	200	...	...	...	...
23	...	...	...	230	200	p200c	210	210	210	220	...	...	...
24	...	...	230	220	210	200	210	210	210	210	...	...	...
25	...	...	230	210	210	210	210	p210c	210	...	...	...	...
26	...	...	...c	230	200	200	210	...	210	...	...	...	...
27	...	...	...c	230	230	220	200	220	p200c	...	...	...	...
28	...	...	230	230	220	220	210	220	220	220	...	...	...
29	...	...	230	230	220	220	220	220	200	...	...	...	...
30	...	...	240	230	220	220	210	...c	...c	...c	...	...	...
31													
MEDIAN*	...	...	230	230	220	210	210	210	210	210	230	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 374

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

SEPTEMBER 1945 SEPTEMBER 1945

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.9	1.2	1.3	1.7	1.8	2.0	1.9	1.9	1.8	1.8	1.4	1.2	...
2	1.1	1.1	1.2	1.3	1.8	1.9	1.9	1.8	1.8	1.8	1.3	1.3	...
3	...c	...c	...c	p1.4c	p1.8c	2.0	2.0	2.0	2.0	...b	1.3	1.2	...
4	1.1	1.2	1.3	1.9	1.8	2.0	1.9	2.1	1.9	1.8	1.8	...c	...
5	1.0	1.1	1.2	1.7	1.8	1.8	2.0	1.9	2.0	1.7	1.3	1.1	...
6	1.0	1.2	1.8	1.7	1.8	2.0	2.0	1.9	p1.9c	p1.8c	1.2	1.2	...
7	0.9	1.0	1.2	1.8	1.8	2.2	2.3	2.2	2.3	1.8	1.4	1.2	...
8	1.2	1.2	1.3	1.8	1.8	1.8	2.3	2.0	1.9	1.8	1.4	1.2	...
9	1.2	1.2	1.3	1.9	2.3	2.2	...c	...c	...c	...c	1.4	1.2	...
10	0.9	1.0	1.4	1.8	1.8	2.3	1.9	1.8	1.8	1.8	1.4	1.2	...
11	1.2	1.3	1.8	1.8	1.9	2.3	2.3	2.3	2.1	...c	...c	...c	...
12	1.2	1.2	1.3	1.8	1.8	2.0	2.0	2.6	1.9	1.8	1.3	1.2	...
13	1.2	1.2	1.3	2.0	1.9	p2.0c	2.0	2.0	1.9	1.8	1.4	1.2	...
14	...	1.3	1.8	2.2	2.2	2.3	2.3	2.2	1.9	1.8	1.3	1.2	...
15	1.0	1.2	1.2	1.8	1.9	2.2	2.0	2.0	1.9	1.8	1.3	1.2	1.0
16	...	1.8	1.8	1.9	1.9	2.1	2.0	2.1	1.9	1.9	1.7	1.2	...
17	...	1.3	1.9	2.2	2.2	2.3	2.4	2.1	1.9	2.2	1.3	1.2	...
18	1.1	1.3	1.7	1.8	2.0	2.0	2.0	2.0	2.0	1.8	1.2	1.2	...
19	1.0	1.0	1.2	1.8	1.9	2.0	2.0	2.0	2.0	1.8	1.4	1.2	...
20	p1.2c	1.2	1.4	1.9	2.0	2.0	p2.8c	2.0	2.0	2.0	1.4	1.2	...
21	0.9	1.2	1.4	1.9	2.0	2.0	2.1	2.0	2.0	2.0	1.9	1.2	...
22	1.2	1.2	1.5	1.9	1.9	p2.0c	2.0	2.2	2.0	2.0	1.3	1.2	1.0
23	1.2	1.2	1.7	2.2	1.9	p1.9c	p2.0c	p2.4c	2.0	2.3	1.5	1.3	...
24	1.4	1.5	1.6	2.3	2.3	2.3	2.3	2.3	2.0	1.9	1.8	1.3	...
25	1.4	1.7	1.6	2.0	2.0	2.2	2.2	p2.1c	2.1	1.2	...c	...c	...
26	...c	...c	...c	1.9	2.0	p2.8c	p2.8c	p2.9c	p2.7c	2.0	p2.3c	1.4	...
27	...c	...c	...c	1.9	2.1	2.0	2.2	p2.9c	p1.9c	1.8	1.7	1.1	...
28	1.3	1.4	2.0	1.9	2.2	p2.3c	2.3	2.3	2.3	1.9	1.5	1.2	...
29	1.2	1.2	1.9	2.0	2.0	p2.2c	2.2	2.2	2.0	1.8	1.3	1.2	...
30	1.2	1.6	1.8	2.0	2.1	p2.5c	2.3	...c	...c	...c	...c	p1.2c	...
31													
* MEDIAN	1.2	1.2	1.4	1.9	1.9	2.0	2.0	2.1	2.0	1.8	1.4	1.2	1.0

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.5	2.4	2.9	3.3	3.5	...	3.7	...	...	3.4	...	2.3	1.1
2	1.4	...	2.9	3.6	...	...	3.7	...	3.9	2.8	2.2	...	1.2
3	...c	...c	...c	p3.3c	...	...	...	...	...	...b	2.8	2.3	1.2
4	1.5	2.5	2.9	3.3	...	3.6	...	3.7	3.5	...	2.8	...c	...
5	1.6	2.4	2.9	...	...	...	...	...	...	3.3	2.9	2.2	1.0
6	1.6	2.5	3.0	2.3	3.5	...	...	...	...c	...c	3.0	2.2	1.1
7	...	2.5	3.0	3.4	...	...	...	...	...	...	2.9	2.3	1.1
8	...	2.4	2.9	...	...	...	...	...	...	3.3	2.8	2.3	1.2
9	...	2.4	3.0	3.4	...	...	...c	...c	...c	...c	2.8	2.3	1.2
10	1.6	2.4	3.0	3.3	3.6	3.6	...	...	3.5	...	2.7	2.3	...
11	1.7	2.5	2.9	3.3	3.4	...	...	...	...	p3.3c	...c	...c	...
12	1.7	2.5	3.0	3.4	...	...	...	...	3.5	...	2.8	2.3	1.1
13	1.7	2.5	3.0	3.5	3.0	...	...	3.7	3.4	...	2.7	2.3	1.0
14	...	2.3	3.0	...	...	...	...	...	3.5	...	2.7	...	1.1
15	...	2.5	3.0	...	3.5	3.7	...	...	...	...	...	2.5	...
16	1.8	2.6	3.0	3.4	3.7	...	...	3.7	3.5	...	2.7	...	1.1
17	p1.5c	2.5	3.0	...	3.7	...	...	...	3.6	...	2.7	2.3	...
18	1.8	2.5	2.8	...	...	3.7	...	...	3.6	...	2.7	2.2	...
19	2.1	2.5	3.2	...	3.6	3.7	...	...	...	...	2.7	2.2	1.1
20	1.7	2.4	3.0	3.6	3.6	...	...	...	...	3.3	2.7	2.3	...
21	1.8	...	2.9	3.4	...	...	...	...	...	...	3.0	2.2	1.8
22	1.7	2.5	3.1	3.5	...	...	...	...	...	3.3	3.0	2.2	1.4
23	1.8	2.6	p3.1c	3.6	...	...	...	...	...	...	2.8	2.3	...
24	1.9	2.7	3.1	...	...	...	...	...	...	...	2.8	2.3	...
25	1.9	2.7	3.0	...	...	...	...	...	...	...	...c	...c	...
26	...c	...c	...c	...	...	...	...	...	...	...	...c	2.4	...
27	...c	...c	...c	...	...	...	...	...	...	...	2.6	2.3	1.2
28	1.9	2.8	...	...	...	...	...	...	...	...	2.8	2.4	1.1
29	1.9	2.8	...	...	...	...	...	...	...	...	2.8	2.2	1.2
30	1.9	2.7	3.3	...	...	...	...	...	...	...	...	p2.1c	1.3
31													
* MEDIAN	1.7	2.5	3.0	3.4	3.6	3.7	3.7	3.7	3.5	3.3	2.8	2.3	1.1

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 375

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1945 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — OCTOBER 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	p10.1f	8.5f	6.0f	4.7	4.4	4.1	6.3	8.5	9.6	9.8	8.5	8.4	8.7	9.1	9.2	9.7	10.1	10.5	p10.4c	p10.2c	9.3f	...f	10.0f	...f	...
2	...f	...f	...f	5.1f	3.7	p2.7f	5.9	8.3	8.9	8.4	p8.0c	7.5	7.6	8.2	8.5	9.0	9.3	9.6	9.4	p8.4c	...f	...f	...f	...f	...
3	p9.6f	7.6	5.7	4.7	3.9	3.0	5.8	7.9	9.2	9.4	8.5	7.8	8.0	8.4	8.9	9.1	9.6	9.8	9.5	8.1	...f	...f	...f	8.0	...
4	...f	p6.6f	5.9	4.9	3.7	2.8	5.9	8.3	9.5	10.1	9.7j	p9.3c	8.9	9.4j	10.4	10.5	10.7	10.5	10.2	p9.6c	...f	p8.4f	...f	9.1	...
5	9.0	7.5	6.5	4.9	4.1	3.7	6.3	8.4	9.9	8.7	8.2	8.0	7.9	8.5	9.4	9.6	10.3	11.0	10.2	...f	...f	...f	...f	...f	...
6	...f	...f	...f	...f	4.1f	3.1	6.1	8.4	9.7	10.8	10.4	8.6	8.5	9.0	9.5	10.0	10.4	10.5	10.6	p10.1c	p9.8c	...f	9.6	9.4	...
7	9.0	6.5	p4.8f	4.5f	3.9	3.4	6.3	8.3	9.6	8.3	7.9	7.8	8.0	8.3	8.9	9.6	9.8	9.8	p10.0c	p9.3c	10.4	8.9	8.7	8.0	7.9
8	7.8	7.9	6.5	5.1	5.2	5.1	7.2	9.0	10.4	10.7	9.2	8.4	8.7	8.9	8.6	8.9	9.0	p8.7c	p9.0c	p9.1c	p8.8f	...f	...f	...f	...
9	...f	7.7	6.9	6.2	5.6	5.0	7.1	9.3	10.8	10.7h	8.4	7.9	8.0	8.1	8.1	8.4	8.5	8.7	8.7	8.6c	8.2	8.4	8.6	9.6	...
10	9.1	7.2	5.0	4.0	3.2	2.6	6.4	8.4	9.9	10.4	9.8h	p8.5c	7.8	8.0	8.7	9.6	9.7	10.2	10.4	p9.7j	p8.3c	...f	...f	...f	...
11	...f	...f	p5.8c	4.7	3.7	3.3	6.6	8.0	9.5	10.6	10.8h	8.8	8.4	8.4	8.5	9.3	p9.8c	10.3	10.6	10.0	...f	...f	...f	...f	...
12	...f	p6.3f	5.5f	4.5f	p4.7f	...f	5.8	8.1	9.5	11.5	p11.8c	p12.1c	p12.2c	11.0h	8.3	8.4	9.1	9.5	10.5	9.7	8.8f	p9.4f	p9.8f	...f	...
13	...f	...f	...f	6.0	5.7	5.0	7.0	9.2	10.5	11.2	11.5	10.3	9.5c	9.4	p9.3c	10.2j	9.9	p9.4c	p8.8c	p8.7c	p8.6f	...f	...f	...f	...
14	p9.4f	7.6	6.3	5.2	4.7	4.7	7.2	9.0	10.2	11.0	10.9h	8.5	8.4	8.3	9.2	p9.0c	p8.6c	p8.8c	p9.4c	p8.8c	p8.7c	9.1	9.8	9.9	8.4
15	9.2	8.5	6.4	5.1	3.8	2.9	p6.4c	p8.0c	p9.6c	11.1	11.0	p8.7c	8.7	9.3	10.0	9.9	p9.2c	8.6	8.0	p8.1c	p8.1c	7.9	8.2	...f	...
16	...f	p7.8f	6.0	5.3	5.1	4.8	7.0	9.1	10.6	p10.7c	p10.9c	p11.0c	11.8	11.8	10.9	10.1	9.7	9.2	9.1	9.0	8.7	8.5	8.3	8.5	...
17	8.4	6.7	5.6	5.4	4.7	4.6	6.5	9.2	11.3	p11.8c	p12.3c	11.7	11.0	11.4	11.4	11.2	11.3	11.2	11.0	10.0f	8.8	8.4	8.8	8.8	9.2
18	8.4	6.9	6.2	5.1	5.0	4.3	7.1	9.7	11.3	p10.8c	11.8	10.4	10.0	10.3	10.6	11.7	p11.6c	p10.7c	p9.9c	p9.0c	8.1	8.5f	...f	...f	...
19	...f	...f	5.6	4.3	3.7f	...f	6.7	6.2	p8.9c	11.5	11.3h	9.7	9.7	9.9	10.1	10.8	p11.9c	p11.7c	p10.6c	p10.9c	...f	...f	p9.6c	p8.9c	...
20	...c	p8.4c	p5.7c	p5.2c	4.3	3.5	p6.7c	p9.0c	p11.2c	11.4	11.9h	9.3	9.2	9.5	10.4	11.1	11.6	p12.0c	p12.3c	p12.2c	p12.1c	12.0	11.0	10.0	...
21	8.2	5.7	3.7	2.9	2.5	2.7	6.8	9.2	10.2	10.1h	8.3	8.0	8.5	9.4	10.4	11.1	11.9	p12.1c	12.0	11.2	10.3	9.6	...f	p9.2f	...
22	8.8	5.7	4.1	3.3	2.9	2.5	6.5	9.0	10.2	10.1h	8.5	8.9	9.0	9.2	9.1	9.5	10.0	10.6	10.5	10.0	p9.7c	p9.3c	9.0c	9.2	8.2
23	p8.5c	7.5	5.4	4.7	p4.0c	3.3	7.1	p9.3c	p10.6c	p11.8c	11.1	9.4	8.6	8.8	9.1	9.5	10.3	10.5	p10.6c	p9.8c	p9.6c	p9.3c	...f	...f	...
24	...f	...f	...f	...f	5.8	4.1	7.8	9.0	9.3	10.2	11.0	10.8h	9.0	8.5	9.1	9.9	10.5	11.8	10.5	...f	...f	...f	...f	...f	...
25	...f	...f	...f	...f	...f	5.8	p8.3f	9.5	6.7	9.7	11.1	11.7	10.1	9.5	9.8	9.3	9.8	10.3	10.8	10.3	p10.8c	p10.6c	p10.5c	10.2	...
26	10.1	9.8	p8.8c	p7.8c	6.3j	p4.7c	p7.5c	9.2	10.0	11.0	11.6	10.2	9.6	8.9	8.7	8.3	8.4	p8.5c	p9.6c	p9.0c	...f	...f	...f	p8.0f	...
27	7.3	6.2	5.5	p5.4c	...c	...c	...c	p9.4c	p10.6c	p11.7c	p11.9c	p9.5c	9.3	p9.3c	p8.8c	p8.8j	p8.6j	p8.9c	p8.9c	p9.0c	...f	...f	...c	...c	...
28	...c	...c	...c	...c	p5.8c	p5.6c	...c	...c	...c	...c	...c	...c	p10.2c	9.9	9.5	9.2	9.2	9.3	9.8	p9.6c	p9.4c	9.2	8.9	8.6	...
29	8.8	9.3	8.5	6.8	5.9	5.1	8.1	9.8	p10.9c	11.8	11.7h	10.1	9.3	9.1	9.1	9.8	9.9	p10.5c	9.5	9.3	8.9	10.0	p9.8c	10.0	9.2
30	8.5	7.0	5.5	4.3	3.8j	3.6j	7.3	9.1	10.5	11.2	p12.0c	11.7h	9.7	9.1	9.0	9.5	10.2	10.3	9.7	p9.3c	8.7	...f	...f	...f	...
31	...f	p7.6f	...f	5.8	4.3	3.6	7.0	9.5	p10.6c	11.6	11.8	10.3	9.8	9.7	9.3	9.4	9.7	9.6	p9.0c	8.5	...f	p7.8f	...f	...f	...
MEDIAN*	8.8	7.5	5.8	5.1	4.3	3.6	6.7	9.0	10.1	10.8	11.0	9.4	9.0	9.1	9.2	9.6	9.8	10.3	10.0	9.3	8.8	9.1	9.6	9.2	8.5

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 376

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1945 — MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS — OCTOBER 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	250	230	230	260	270	260	260	230	230	330	330	340	340	360	320	300	220	240	280	340	340	260	240	240	279
2	240	240	240	240	240	260	240	230	220	330	...	340	390	360	220	220	220	250	280	360	370	270	280	240	...
3	230	210	230	230	240	240	250	230	310	320	340	340	210	350	330	240	230	240	280	370	370	330	270	240	276
4	210	220	240	240	240	250	250	230	290	300	330	p350c	360	360	330	310	230	250	300	330	330	260	260	220	279
5	210	230	230	250	250	250	250	240	310	220	340	360	360	340	320	220	230	260	320	350	350	290	260	280	280
6	280	250	250	260	250	260	250	250	210	300	330	350	380	350	200	220	220	260	300	340	330	250	260	230	274
7	220	230	250	250	250	260	260	240	240	350	370	380	p340c	340	300	220	210	260	290	290	230	240	230	230	270
8	230	220	240	280	280	260	250	240	250	320	330	330	340	320	230	360	260	250	270	340	340	390	360	280	290
9	230	230	230	270	270	260	260	240	230	310	330	340	330	330	210	220	220	250	290	370	320	270	240	250	271
10	220	220	240	240	250	250	260	230	230	310	330	350	p330c	380	330	240	250	270	280	360	420	280	300	270	285
11	240	230	230	240	230	250	240	240	300	320	350	360	350	360	330	210	230	250	300	380	340	250	290	250	282
12	230	240	240	270	310	310	270	240	310	290	310	330	340	330	330	230	230	250	290	380	400	240	300	250	288
13	240	240	230	250	260	300	260	250	300	330	330	330	330	310	230	220	230	250	290	350	350	320	260	240	279
14	240	240	230	270	290	290	260	240	300	320	330	340	350	360	230	300	230	260	290	340	340	290	260	240	285
15	230	230	230	240	240	240	250	p250c	240	320	320	320	330	320	320	230	p240c	250	270	280	330	340	330	340	279
16	300	230	230	240	270	290	260	230	230	p300c	p310c	p300c	320	330	240	230	240	260	260	290	300	270	270	300	267
17	230	220	220	250	260	240	250	230	240	p300c	330	330	300	300	230	290	220	260	270	320	330	330	320	290	273
18	230	250	240	240	240	250	250	240	230	p300c	330	320	320	330	300	200	260	260	280	340	380	300	310	260	278
19	260	230	240	260	250	260	250	230	p280c	330	320	320	320	320	310	220	260	250	270	310	390	310	330	300	284
20	290	210	270	240	240	260	250	250	240	300	320	320	310	300	200	220	260	270	280	310	300	300	260	230	268
21	230	240	240	270	260	270	250	230	230	320	330	340	350	330	300	310	240	270	290	330	320	300	290	240	282
22	220	230	260	280	240	260	250	230	300	330	370	350	330	320	200	220	240	250	280	290	290	260	240	230	270
23	230	220	240	230	250	260	260	230	p300c	p330c	340	370	360	330	340	210	240	260	310	370	350	p340c	340	p280c	291
24	p260c	310	280	270	230	240	260	240	230	300	320	340	340	340	330	220	280	270	320	340	320	340	p330c	320f	293
25	310	300	300	300	250	230	240	240	230	230	320	280	340	300	210	240	250	270	290	330	280	230	280	300	273
26	300	270	230	240	240	240	260	230	230	300	300	300	310	320	210	210	230	260	290	330	310	330	260	240	268
27	230	230	230	230	250	...c	...c	...c	...c	...c	340	p340c	340	...c	...c	...e	...c	260	290	370	420	270	240	250	...
28	250	260	250	270	280	260	250	...c	...c	...c	...c	...c	...c	320	260	270	280	260	290	320	280	240	270	260	...
29	240	240	230	230	260	240	260	q260c	p290c	310	310	330	340	320	...c	...c	260	250	300	320	310	260	240	230	...
30	210	230	240	250	270	260	250	240	230	300	310	320	340	330	220	230	220	250	300	340	300	360	310	280	275
31	230	250	260	230	250	250	250	230	p280c	330	320	320	350	320	330	260	230	250	280	350	370	340	320	310	288
MEDIAN*	230	230	240	250	250	260	250	240	240	310	330	340	340	330	300	230	230	260	290	340	330	290	270	250	276

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 377

UCTOBER 1945 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — OCTOBER 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	5.0	4.8	5.0	4.8	4.8	4.8	4.5	...	...	...
2	...	...	...	5.0	p4.9c	4.8	5.0	4.9	...	...	...	...	...
3	...	...	4.8	4.7	4.9	4.8	...	4.9	4.8	...	...	...	...
4	...	...	4.7	4.8	4.9	p5.0c	5.0	5.0	5.0	4.6	...	...	...
5	...	...	4.8	...	4.9	5.0	5.0	5.0	4.9	...	...	...	...
6	...	...	...	...c	4.8	5.0	5.1	4.9	...	...	...	...	...
7	...	...	...	4.9	5.1	5.0	p5.0c	5.0	4.8	...	...	...	...
8	...	...	...	4.7	4.9	5.0	4.9	4.8	...	5.0	...	...	...
9	...	...	...	4.8	4.9	5.0	4.9	4.8	...	...	...	...	...
10	...	...	...	5.0	5.0	5.0	p5.0c	5.2	4.8	...	...	...	...
11	...	...	4.8	5.0	4.9	5.0	5.0	5.0	4.8	...	...	...	...
12	...	...	4.8	4.7	4.8	4.8	4.9	4.8	4.7	...	...	...	...
13	...	...	4.9	5.1	4.8	4.9	4.9	4.7	...	...	...	...	...
14	...	...	4.5	4.8	4.7	5.0	4.9	4.7	4.6	...	...	...	...
15	...	...	...c	4.9	5.0	5.0	4.9	4.8	4.8	...	...	...	...
16	...	...	...	...c	...c	p4.9c	4.8	4.9	...	...	...	...	...
17	...	...	...	...c	5.2	5.0	4.9	4.8	...	...	...	...	...
18	...	...	...	p5.0c	5.2	5.0	5.0	5.0	4.8	...	...	...	...
19	...	...	...c	5.0	4.8	4.9	5.0	4.8	4.8	...	...	...	...
20	...	...	...	4.8	4.9	5.0	4.8	4.7	...	...	...	...	...
21	...	...	...	4.7	4.8	4.9	4.8	5.0	4.5	4.7	...	...	...
22	...	...	4.7	5.0	5.0	5.0	5.0	4.8	...	...	...	...	...
23	...	...	...c	p5.0c	5.1	5.1	5.1	4.9	4.9	...	...	...	...
24	...	...	...	5.0	5.3	5.2	5.0	5.1	5.0	...	...	...	...
25	...	...	...	...	5.3	4.8	5.3	4.8	...	...	...	...	...
26	...	...	...	5.0	5.0	5.0	5.2	5.0	...	...	...	...	...
27	...	...	...	...c	5.2	p5.2c	5.2	...	...c	...	...	...	...
28	...	...	...	...c	...c	...c	...c	5.0	...	...	...	...	...
29	...	...	...c	5.2	5.0	5.0	5.3	5.1	...	...	...	...	...
30	...	...	...c	5.1	4.9	5.0	5.2	5.0	...	...	...	...	...
31	...	...	...c	5.3	5.0	5.1	5.3	5.0	5.0	...	...	...	...
* MEDIAN	...	...	4.8	5.0	4.9	5.0	5.0	4.9	4.8	4.6	...	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	220	210	210	210	220	200	220	...	...	...
2	...	...	...	220	p210c	210	210	210	...	...	...	...	...
3	...	...	230	220	210	230	...	210	210	...	...	...	...
4	...	...	240	230	220	p210c	200	200	220	230	...	...	...
5	...	...	230	...	230	220	220	230	210	...	...	...	...
6	...	...	...	...c	220	220	220	230	...	...	...	...	...
7	...	...	...	240	230	220	p210c	200	220	...	...	...	...
8	...	...	...	220	220	220	210	220	...	240	...	...	...
9	...	...	...	230	220	240	220	220	...	...	...	...	...
10	...	...	...	230	230	220	p220c	230	230	...	...	...	...
11	...	...	240	230	240	220	210	220	210	...	...	...	...
12	...	...	240	230	230	230	230	230	220	...	...	...	...
13	...	...	240	240	230	230	230	210	...	...	...	...	...
14	...	...	210	230	230	200	200	210	230	...	...	...	...
15	...	...	...c	240	230	230	230	220	230	...	...	...	...
16	...	...	...	...c	...c	p200c	220	220	...	...	...	...	...
17	...	...	...	...c	230	230	220	220	...	...	...	...	...
18	...	...	...	p230c	230	230	220	230	220	...	...	...	...
19	...	...	...c	230	220	220	210	210	210	...	...	...	...
20	...	...	...	230	220	200	200	200	...	...	...	...	...
21	...	...	...	230	210	210	220	200	210	240	...	...	...
22	...	...	230	220	220	220	220	220	...	...	...	...	...
23	...	...	...c	p220c	230	220	220	220	210	...	...	...	...
24	...	...	...	240	230	220	210	210	200	...	...	...	...
25	...	...	...	...	220	230	230	220	...	...	...	...	...
26	...	...	...	230	230	220	220	230	...	...	...	...	...
27	...	...	...	...c	...c	...c	...c	...c	...c	...	...	...	...
28	...	...	...c	...c	...c	...c	...c	...c	...	...	...	...	...
29	...	...	...c	230	...c	...c	...c	...c	...	...	...	...	...
30	...	...	...c	230	...c	220	220	210	...	...	...	...	...
31	...	...	...c	240	...c	220	220	210	200	...	...	...	...
* MEDIAN	...	...	240	230	230	220	220	220	210	240	...	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 378

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

OCTOBER 1945 OCTOBER 1945

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.2	1.3	1.8	1.9	2.2	2.3	2.1	2.2	2.2	1.8	1.7	1.4	...
2	1.2	1.4	1.8	2.0	p2.4c	2.8	2.8	2.7	2.2	1.9	1.8	1.3	...
3	1.2	1.3	1.8	1.9	2.3	2.8	2.7	2.8	2.8	2.9	1.2	1.2	1.1
4	1.3	1.4	1.8	2.4	2.7	p2.7c	2.3	2.7	2.3	2.0	1.8	1.8	...
5	1.8	1.8	2.0	2.2	2.8	2.8	2.8	3.7	2.2	1.9	1.5	1.2	1.2
6	1.4	1.8	1.8	1.9	2.2	2.2	2.8	2.2	2.2	1.9	1.7	1.3	...
7	1.3	1.4	1.8	2.2	2.4	2.3	2.8	2.3	2.1	2.0	1.5	1.3	...
8	1.4	1.8	1.8	1.9	2.3	2.7	2.8	2.3	2.1	2.0	1.7	1.3	1.2
9	1.2	1.8	1.8	2.0	2.3	2.8	2.8	2.8	2.2	1.9	1.8	1.3	1.2
10	1.8	1.8	2.0	2.1	2.7	p2.8c	p3.7c	2.8	2.5	2.2	1.9	1.3	1.2
11	1.4	1.7	p2.0c	2.3	2.7	2.8	2.8	2.9	2.2	2.1	1.9	1.7	...
12	1.7	1.9	2.0	...b	...b	2.8	2.4	2.3	2.2	1.9	1.7	1.8	1.2
13	1.3	1.7	2.0	2.9	2.7	2.7	2.7	2.5	2.7	2.0	1.7	1.4	...
14	1.2	1.7	1.9	2.0	2.7	2.8	2.7	2.7	2.0	2.0	1.8	1.3	1.0
15	...c	...c	...c	2.0	2.3	2.8	2.7	2.8	2.1	1.9	...	1.4	...
16	1.4	p1.8c	1.9	...	...	p2.2c	2.2	1.9	2.1	1.9	1.8	1.8	1.2
17	1.2	p1.8c	2.2	p2.2c	2.3	2.2	2.3	2.2	2.2	2.0	1.9	1.7	1.2
18	1.3	1.7	1.8	p2.7c	2.2	2.3	2.8	2.8	2.7	2.8	2.7	1.7	...
19	1.4	1.2	p1.7c	1.9	2.0	2.2	2.1	2.1	1.9	1.8	1.8	1.3	...
20	...c	...c	...c	1.8	1.9	2.0	2.1	2.2	2.1	1.9	1.4	1.2	1.0
21	1.4	1.4	1.7	1.9	2.0	2.1	2.4b	2.3	2.4	2.0	1.9	1.3	...
22	1.2	1.7	1.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
23	1.2	1.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
24	1.7	1.8	2.0	2.0	2.2	p2.5c	2.1	2.7	1.9	1.8	1.7	1.2	...
25	1.7	1.7	...c	...c	2.1	2.2	2.7	p2.7c	p2.7c	2.6	1.8	1.7	1.0
26	1.3	1.8	2.0	2.0	2.6	2.8	...c	...c	2.1	2.0	1.9	1.7	...c
27	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	q2.1c	...
28	...c	...c	...c	...c	...c	...c	...c	...c	2.0	2.0	2.0	1.8	1.7
29	1.8	2.2	...c	2.2	...c	...c	...c	...c	...c	...c	1.9	1.2	...
30	1.3	1.9	2.1	2.6	...	2.1	2.2	2.2	2.0	1.9	1.4	1.3	...
31	1.7	1.6	p1.8c	2.0	2.0	2.2	2.1	2.2	2.1	2.1	1.8	1.3	...
MEDIAN*	1.3	1.7	1.8	2.0	2.3	2.6	2.7	2.7	2.2	2.0	1.8	1.3	1.2

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.9	2.8	...	...	4.0	...	...	...	...	...	2.8	2.2	1.2
2	1.9	2.7	...	...	...c	...	...	...	...	...	2.9	2.3	1.2
3	1.9	2.7	...	...	...	...	...	...	...	...	2.8a	...	...
4	2.0	2.7	...	4.0	...	...	...	...	...	...	2.9	2.3	1.2
5	2.0	2.8	...	...	...	...	...	...	...	...	2.8	2.4	1.2
6	2.0	2.7	...	...c	...	...	...	...	...	...	2.7	2.3	1.2
7	2.0	2.7	...	...	...	...	...	...	...	...	2.8	2.3	1.2
8	2.1	2.8	...	...	...	...	...	...	...	...	...	2.1	1.2
9	2.0	2.7	...	...	...	...	...	...	...	...	3.0	2.3	...
10	2.1	2.8	3.5	...	...	...	...	...	...	...	...	...	1.3
11	2.0	2.7	...	...	...	...	...	...	...	...	...	2.4	1.2
12	2.0	2.8	...	...	...	...	...	...	...	...	2.8	2.4	...
13	1.9	2.7	...	...	...	...	...	...	...	...	2.8	2.3	1.2
14	2.1	2.7	...	...	...	...	...	...	...	...	...	2.2	...
15	...c	...c	...c	...	...	...	...	...	...	...	...	2.3	...
16	2.0	2.7	...	...	...	...	...	...	...	...	2.9	2.3	...
17	2.2	...c	...	...c	...	...	...	...	...	...	2.8	2.4	1.2
18	2.0	2.7	...	...c	...	...	...	...	...	...	...	2.3	...
19	2.0	1.3	...c	...	...	...	...	...	...	...	...	p2.2c	...
20	...c	...c	...	3.6	...	...	...	...	3.6	3.3	2.8	2.2	1.5
21	2.0	2.7	...	...	...	...	...	...	...	3.4	2.9	2.3	1.1
22	2.0	2.7	...	3.4	...	...	...	...	3.6	...	...	2.4	1.3
23	...c	q2.9c	...c	...	4.0	...	...	...	...	3.4	2.8	2.3	...
24	2.0	2.8	3.4	3.8	...	...	...	...	...	3.3	...c	2.2	1.2
25	q2.1c	p3.0c	...c	...c	...	...	...	...	...	...	...	2.2	1.3
26	2.1	2.3	3.5	...	...	...	...	...	...	...	...	2.4	1.2
27	...c	...c	...c	...c	...c	...c	...	...c	...c	...c	...c	...f	1.2
28	...	...c	...c	...c	...c	...c	...c	...c	...	...	...	2.2	1.4
29	2.2	...	...c	...	...c	...	...c	...c	...c	...c	...	2.3	1.2
30	2.3	2.9	...	...	...	...	...	...	...	...	2.8	2.4	1.2
31	2.1	2.9	...c	...	...	...	...	...	...	...	3.0	2.3	1.2
MEDIAN*	2.0	2.7	...	...	...	...	...	...	...	...	2.8	2.3	1.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 379

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1945 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — NOVEMBER 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...f	...f	p6.9f	7.5	6.9	6.0	8.1	10.0	11.2	11.7	11.4h	10.0	9.[illegible]	9.7	9.5	9.7	9.8	9.4	9.3	9.0	[illegible].7c	7.9	p8.4f	...f	...
2	...f	p8.7c	5.5	p3.5c	2.5	3.0	6.8	9.3	10.6	11.4	12.0	12.0h	10.5	10.2	10.2	9.9	10.0	p9.6c	p8.6c	...c	...c	...c	...c	...c	...
3	...c	...c	...c	...c	...c	...c	...c	...c	9.9	9.9	9.1	8.8	8.4	8.8	9.7	10.5	10.3	10.5	p10.0c	9.6j	8.2f	...f	p7.4f	...f	...
4	...f	...f	5.4f	p4.5c	2.8	3.1	7.1	9.2	p10.3c	10.[illegible]	10.6h	9.8	9.7	9.8	9.9	10.3	10.0	10.3	10.8	p9.5c	...f	9.6f	...f	...f	...
5	...f	...f	p6.2f	5.7f	p4.8f	4.8	...c	...c	...c	11.[illegible]	11.3h	9.9	9.5	9.6	9.7	9.6	9.9	p9.9c	p9.8c	9.5	...f	...c	...c	...c	...
6	...c	...f	...c	...f	...f	...c	...c	...c	...c	11.1	p10.4c	p9.6c	p9.9c	p10.1c	p10.0c	p9.7c	10.1	10.3	...c	...c	...c	...c	...c	...c	...
7	...c	...c	...c	...c	...c	...c	...c	...c	p10.9c	11.6	10.6	p9.5c	9.0	8.4	8.9	9.7	10.4	p10.7c	p10.8c	10.6	9.9	...f	...f	...f	...
8	...f	5.9	3.5	2.3	1.8	2.9	6.5	9.0	p9.3c	10.8	10.0	8.6	p8.5c	8.6	8.3	9.3	10.0	10.6	10.8	10.4	p9.6c	...f	...f	...f	...
9	...f	...f	p5.8c	3.8	...f	...f	...f	8.5	10.0	10.6	11.0	10.2h	9.6	9.3	9.5	9.6	9.7	9.9	10.0	9.5	...f	...f	...f	...f	...
10	...f	...f	...f	...f	...f	p5.8f	8.3	9.9	11.5	12.0	11.1h	10.3	10.4	10.3	10.0	10.0	10.1	10.5	10.6	10.2	9.3	...f	...f	...f	...
11	...f	...f	...f	...f	...f	...f	7.3	9.1	11.0	12.0	12.0	p12.2c	p12.1c	11.7	11.8	11.8	p12.1c	p12.1c	p12.0c	...c	...f	...f	...f	...f	...
12	...f	...f	...f	...f	...f	4.3f	7.4	10.0	11.0	11.3	p11.0c	10.0	10.0	10.0	10.1	10.5	11.0	10.9	p10.6c	10.3	...f	...f	...f	...f	...
13	...f	...f	p5.8f	...c	...c	...c	8.0	10.5	11.2	12.0	p12.3c	p12.2c	p12.2c	p12.1c	p12.1c	...c	...c	...c	...c	p11.8c	...f	...f	...f	...f	...
14	...f	...f	...f	5.6	3.3	3.2	7.0	p9.7c	10.5	10.8	10.5	10.5	10.6	10.0	10.9	11.7	11.9	p12.0c	p11.9c	11.8	p11.7c	...f	...f	...f	...
15	...f	...f	...f	...f	p5.7f	p4.7c	7.0	9.2	10.6	p11.1c	11.7	12.1	p12.8c	p12.4c	...c	...c	...c	...c	...c	...c	p11.6c	...f	...f	...f	...
16	...f	...f	...f	p4.6f	3.4	3.5	7.3	9.2	10.5	10.[illegible]	11.3	11.0	11.0	11.1	10.8	10.4	11.0	p10.9c	p10.4c	p10.3c	p10.1c	...f	...f	...f	...
17	...f	p6.4f	5.9	4.7	4.0	4.1	7.2	9.3	10.8	11.3	11.9	12.2	p12.2c	...c	...c	...c	...c	p11.9c	p11.0c	9.3	...f	...f	...f	...f	...
18	...f	...f	p5.7f	p4.5c	...f	p3.6f	6.8	8.8	9.4	9.8	10.1	10.6	11.2	11.7	12.0	12.0	12.0	p11.4c	10.2	p10.2c	...f	...f	...f	...f	...
19	...f	...f	...f	4.2	3.0	3.1	7.0	p8.9c	p9.1c	9.3	9.6	10.3	p11.1c	12.0	p11.9c	p11.8c	...c	...c	...c	...c	p12.2c	p11.1c	...f	...f	...
20	...f	...f	...f	...f	...f	3.8	7.0	9.1	9.8	9.8	9.7	10.1	10.6	p11.8c	p12.2c	p12.6c	...c	...c	...f	...f	...f	...f	...f	...f	...
21	...f	...f	...f	4.3f	3.7	3.6	7.2	p9.2c	p10.4c	10.8	p9.3c	p9.0c	p9.3c	9.8	p10.3c	11.0	p11.6c	p12.0c	...c	...c	...f	p11.6c	...f	...f	...
22	...f	...f	...f	...f	...f	3.7	p7.6c	9.7	11.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	p10.9c	p10.5c	p9.7c	...c	...f	...
23	...f	...f	...f	...f	...f	...f	7.8	p9.3c	10.8	10.6	9.1	8.4	8.3	8.6	9.0	9.7	9.9	p10.0c	10.0	9.5	...f	...f	...f	...f	...
24	...f	...f	...f	...f	...f	...f	7.0	9.9	10.6	10.8h	9.0	8.8	9.1	9.2	9.3	9.5	9.7	p9.3c	p9.0c	...c	...f	...f	...c	...f	...
25	...f	...f	...f	...f	...f	...f	7.4	9.7	10.9	p11.3c	p11.7c	10.8	10.5	10.6	11.2	p11.5c	11.6	p10.0c	8.5	...f	...f	...f	...f	...f	...
26	...f	...f	...f	...f	4.1	p3.5c	p7.3c	9.7	p10.9c	11.0	11.5	p11.8c	12.0	11.8	11.3	p11.5c	p10.8c	p10.9c	p9.8c	p8.4c	7.5f	...f	...f	...f	...
27	...f	...f	...f	...f	...f	...f	...c	p9.8c	p10.9c	11.9	12.0	...c	...c	...c	p13.2c	p12.8c	...c	...c	...c	p9.4c	p9.4c	...f	...f	...f	...
28	...f	...f	...f	...f	...f	...f	6.5	8.7	9.4	10.0	9.7	9.4	9.0	9.3	9.3	10.1	10.2	10.8	p9.6c	8.5	...f	...f	...f	...f	...
29	...f	...f	...f	...f	...f	...f	...c	...c	...c	11.1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
30	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	12.0	10.1	9.5	9.4	9.3	9.3	8.8	8.7	p8.7c	...c	...c	...c	...c	...
31																									
MEDIAN*	...f	6.4	5.8	4.5	3.6	3.6	7.2	9.3	10.7	11.0	11.0	10.2	10.1	10.0	10.0	10.3	10.2	10.5	10.0	9.7	9.8	9.8	7.9	...f	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 380

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1945

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	270	270	240	230	250	260	260	230	320	320	320	320	330	320	310	q220c	200	250	270	330	330	340	310	250	281
2	210	220	220	220	250	280	260	250	q260c	300	310	320	310	310	210	p220c	230	250	280	...c	...c	...c	...c	...c	...
3	...c	...c	...c	...c	...c	...c	...c	...c	330	330	360	370	p350c	q330c	330	310	220	250	280	350	380	330	330	270	...
4	250	240	230	210	250	280	250	230	300	310	330	350	360	320	320	300	230	240	280	320	270	280	340	350	285
5	340	330	270	240	240	240	...c	...c	...c	310	330	350	p350c	340	310	q250c	230	260	270	380	320	...c	...c	...c	...
6	380	360	340	230	230	260	...c	...c	...c	320	...c	...c	...c	p330c	p330c	340	220	250	260	...c	...c	...c	...c	...c	...
7	...c	250	220	...c	...c	...c	...c	...c	230	330	350	...c	...c	...c	...c	350	220	240	260	320	340	330	320	310	...
8	240	220	230	250	290	300	250	250	320	320	360	...c	...c	...c	...c	...c	270	260	260	340	350	320	390	410	...
9	320	230	220	330	390	300	250	250	300	310	340	360	350	320	310	210	230	250	300	320	350	430	480	440	316
10	400	360	340	300	280	240	250	220	310	330	330	340	340	330	330	330	230	240	280	350	350	400	430	440	323
11	410	350	280	250	250	260	250	240	230	310	330	330	320	320	210	210	220	250	290	p330c	350	390	370	390	298
12	360	300	290	280	260	240	260	230	220	320	330	330	340	340	p210c	200	200	250	290	330	330	400	430	350	295
13	290	260	260a	260a	290	270	250	240	290	300	320	330	340	330	340	p210c	260	260	270	310	370	290	470	440	302
14	400	320	260	220	230	260	260	p280c	300	320	310	340	350	330	320	210	240	250	270	310	360	430	400	400	307
15	400	380	330	240	230	270	260	230	230	p320c	330	330	320	320	210	210	230	240	270	320	340	390	420	360	300
16	340	280	240	230	240	270	250	240	230	290	320	330	330	330	330	200	210	260	290	330	350	370	370	330	290
17	290	250	240	240	240	250	250	250	240	310	330	320	p320c	p320c	320	330	230	250	270	340	390	460	420	390	302
18	300	280	250	220	230	260	260	230	220	320	330	340	320	p320c	q330c	310	270	250	290	320	390	480	440	390	306
19	340	300	260	240	240	300	270	p240c	p240c	330	320	250	p320c	350	360	210	240	240	290	330	330	360	350	330	293
20	290	300	270	260	250	260	260	280	230	310	330	360	340	q330c	p330c	210	210	240	280	300	310	390	360	370	295
21	330	290	260	240	340	240	250	220	320	320	...c	...c	...c	...c	...c	220	240	240	270	320	330	300	360	330	...
22	310	300	310	270	230	250	240	220	220	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	320	340	370	p360c	340	...
23	370	360	350	340	300	280	250	230	p240c	340	380	q400c	p400c	410	200	340	230	250	290	360	420	470	410	410	335
24	400	380	390	370	340	310	240	230	320	330	360	p370c	p380c	390	380	380	220	260	280	350	320	400	380	350	339
25	320	300	310	270	260	250	280	230	220	p320c	p370c	360	350	360	360	250	220	250	300	300	280	390	380	340	303
26	330	310	290	260	260	250	p250c	230	p280c	310	p330c	p350c	370	360	360	230	240	250	p270c	330	360	390	340	290	302
27	270	250	290	300	270	260	250	250	220	320	340	330	330	320	p330c	340	p250c	220	280	310	360	390	380	350	300
28	330	320	300	340	330	340	260	230	240	310	340	340	360	350	200	340	220	260	280	320	400	370	350	320	310
29	290	290	290	290	290	270	250	230	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
30	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	360	360	320	360	230	210	260	260	300	...c	...c	...c	...c	...
31																									
ME-DIAN*	330	300	270	250	250	260	250	230	240	320	330	340	340	330	330	230	230	250	280	320	350	390	380	350	298

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 381

NOVEMBER 1945 — IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY — NOVEMBER 1945

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	5.0	5.2	5.1	5.2	5.1	5.0	4.9	...	...	...	...
2	...	...	...	5.1	5.1	5.0	5.0	5.0	...	...	...	...	...
3	...	...	5.2	4.9	5.3	5.0	p5.0c	p5.0c	4.9	p4.8c	...	...	...
4	...	...	4.7	5.0	5.1	5.1	5.1	4.8	5.0	4.5	...	...	...
5	...	...	...c	4.9	5.0	4.9	...c	q5.0c	p4.9c	...	...	...	...
6	...	...	...c	4.7	...c	...c	...c	p5.0c	...c	4.9	...	...	...
7	...	...	...c	4.9	...c	...c	...c	...c	...c	4.8	...	...	...
8	...	...	4.5	...c	...c	...c	...c	...c	...c	...c	...	...	...
9	...	...	4.7	4.7	4.7	...c	...c	...c	4.7	...	...	...	...
10	...	...	4.7	4.8	q4.8c	...c	...c	...c	4.6	4.6	...	...	...
11	...	...	...	4.7	4.7	p4.7c	...c	...c	...c	...	...	...	...
12	...	...	...	...c	...c	...c	...c	...c	...c	...	...	...	...
13	...	...	4.8	4.8	p4.8c	4.8	...c	4.9	...c	q4.8c	...	...	...
14	...	...	4.9	...c	...c	...c	...c	...c	q4.8c	...	...	...	...
15	...	...	...	p4.9c	4.9	q4.9c	...c	...c	...c	...	...	...	...
16	...	...	...	...c	q4.9c	...c	...c	...c	...c	...	...	...	...
17	...	...	...	4.8	p5.0c	q5.0c	...c	...c	5.0	4.9	...	...	...
18	...	...	...	4.8	p4.9c	p4.9c	p4.9c	p4.9c	p4.9c	q4.9c	...	...	...
19	...	...	...	q5.0c	...c	...c	...c	q4.9c	...c	...	...	...	...
20	...	...	...	...c	...c	4.9	...c	...c	...c	...	...	...	...
21	...	...	4.9	...c	...c	...c	...c	...c	...c	...c	...	...	...
22	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
23	...	...	...	4.8	p4.8c	p4.9c	p4.9c	p5.0c	...c	4.9	...	...	...
24	...	...	4.7	4.9	p4.9c	p4.9c	p4.3c	4.8	4.9	4.8	...	...	...
25	...	...	...	...c	p4.9c	p4.9c	p4.8c	q4.8c	5.0	...	...	...	...
26	...	...	...c	4.8	...c	...c	...c	...c	4.9	...	...	...	...
27	...	...	...c	4.9	4.9	4.9	p4.9c	p4.9c	p4.8c	p4.8c	...	...	...
28	...	...	...	4.8	4.9	p4.9c	p4.9c	4.9	p4.8c	4.8	...	...	...
29	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
30	...	...	...c	...c	...c	5.1	5.0	4.7	5.0	...c	...	...	...
31													
* MEDIAN	...	...	4.8	4.8	4.9	4.9	4.9	4.9	4.9	4.8	...	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	230	230	220	210	210	p210c	p200c	...	...	...	...
2	...	...	...	p220c	220	p200c	p200c	p210c	...	...	...	...	...
3	...	...	250	230	230	p220c	210	210	210	p220c	...	...	...
4	...	...	...c	200	220	210	210	210	210	...c	...	...	...
5	...	...	...c	220	210	210	...c	q200c	p220c	...	...	...	...
6	...	...	...c	220	...c	...c	...c	p200c	p210c	210	...	...	...
7	...	...	...c	210	...c	...c	...c	...c	...c	210	...	...	...
8	...	...	230	...c	...c	...c	...c	...c	...c	...	...	...	...
9	...	...	220	220	p220c	...c	...c	...c	210	...	...	...	...
10	...	...	240	220	200	...c	...c	...c	210	200	...	...	...
11	...	...	...	210	200	p230c	...c	...c	...c	...	...	...	...
12	...	...	...	210	200	...c	...c	...c	...c	...	...	...	...
13	...	...	220	210	...c	...c	...c	...c	...c	200	...	...	...
14	...	...	230	p210c	...c	...c	...c	...c	210	...	...	...	...
15	...	...	...	p200c	220	...c	...c	...c	...c	...	...	...	...
16	...	...	...	...c	q210c	...c	...c	...c	...c	...	...	...	...
17	...	...	...	220	210	...c	...c	...c	210	220	...	...	...
18	...	...	...	210	p210c	p200c	...c	...c	...c	...c	...	...	...
19	...	...	...	p200c	...c	...c	...c	210	...c	...	...	...	...
20	...	...	...	...c	200	...c	...c	...c	...c	...	...	...	...
21	...	...	220	...c	...c	...c	...c	...c	...c	...c	...	...	...
22	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
23	...	...	...	210	210	p210c	p200c	200	p200c	200	...	...	...
24	...	...	220	200	200	p200c	p200c	200	210	220	...	...	...
25	...	...	...	...c	p200c	200	p200c	200	230	...	...	...	...
26	...	...	...c	210	...c	...c	...c	...c	220	...	...	...	...
27	...	...	...c	230	220	210	...c	...c	...c	220	...	...	...
28	...	...	...	200	210	210	210	200	p200c	220	...	...	...
29	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
30	...	...	...c	...c	...c	210	210	210	200	...c	...	...	...
31													
* MEDIAN	...	...	230	210	210	210	210	200	210	220	...	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f°F2 EQUAL TO OR LESS THAN f°F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 382

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

NOVEMBER 1945 NOVEMBER 1945

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY													CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.3	1.7	1.0	2.2	2.1	...c	...c	...c	2.2	2.0	1.7	1.3	...	2.2	2.9	...	...	...	...	...	...c	...c	...c	3.0	2.4	1.3
2	1.4	1.7	2.4	2.1	2.1	2.1	2.1	2.2	2.2	2.4	1.7	1.3	...	2.4	2.9	...c	...c	...c	...c	...c	...c	...c	...c	p2.9c	2.3	1.4
3	...c	...c	2.1	2.4	2.2	...c	...c	...c	q2.3c	2.2	p1.8c	1.3	...	...c	...c	...c	...c	...	...c	...c	...	...	...c	q3.1c	q2.5c	q1.1c
4	1.4	1.5	2.0	2.2	...c	...c	...c	p2.8c	p2.4c	p2.0c	1.7	1.2	1.0	2.2	2.9	...c	...c	...c	...c	...c	...	...c	...c	2.9	2.3	1.2
5	...c	...c	...c	1.4	2.0	2.0	q2.2c	q2.5c	q2.1c	p2.1c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
6	...c	...c	...c	2.0	...c	...c	...c	...c	p2.3c	2.3	1.4	1.2	0.9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	2.4	1.2
7	...c	...c	1.7	1.9	1.4	...c	...c	...c	1.9	1.8	1.5	1.7	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	3.3	2.7	2.4	1.2
8	1.2	1.3	1.5	2.0	...c	...c	...c	2.3	2.4	p 8c	1.7	1.7	...c	2.2	q2.7c	...	...	...c	...c	...c	...c	...c	...c	p3.4c	2.4	...c
9	1.1	1.0	2.0	1.9	1.9	2.1	2.2	2.2	2.0	1.9	1.2	1.2	...	2.2	2.9	3.4	...	...c	...c	...c	...c	3.6	...	...	2.3	...
10	1.0	1.7	p1.8c	0.9	2.0	2.0	2.0	2.0	2.0	1.2	1.2	1.2	...	2.2	2.8	3.3	...c	...c	...c	...c	...c	...	3.3	3.1	2.4	1.3
11	0.9	1.2	1.8	0.9	2.0	p2.0c	2.0	2.0	1.9	1.9	1.7	1.0	...	2.2	2.9	3.3	3.5	...	...	...c	...c	3.6	3.4	2.9	2.3	1.5
12	q1.3c	1.7	1.8	1.2	2.0	2.1	1.3	q2.2c	2.0	1.8	1.9	1.3	...	2.2	3.0	3.5	...c	...c	...c	...c	...c	...	...	3.0	2.4	1.4
13	0.9	1.0	1.3	1.9	2.0	q2.4c	...c	...c	...c	2.0	2.1	1.7	0.9	2.2	...	...	...	...c	...c	...c	...c	...c	...	3.4	2.5	1.3
14	0.9	p1.0c	1.3	2.2	2.1	2.0	2.2	2.2	2.1	2.0	1.8	1.3	...	2.3	...c	...	...	...c	...c	...	...c	...	3.5	3.2	2.4	1.4
15	1.2	1.7	p1.8	p1.9c	2.0	2.0	2.1	p2.1c	2.1	1.8	1.3	1.1	...	2.3	3.1	p3.7c	...	...	...c	...c	...c	...c	...	3.0	2.3	1.3
16	1.2	1.7	1.9	p2.5c	2.8	2.1	p2.2c	p2.3c	2.0	1.9	1.8	1.3	...	2.5	3.2	3.7	...c	...c	...c	...c	...c	...	...	3.1	q2.7c	1.3
17	1.3	1.7	1.9	2.0	2.1	p2.4c	p2.3c	q2.3c	2.1	2.0	1.8	1.3	...	2.4	...	...	...	...	...c	...c	...c	...	...	3.0	2.5	1.3
18	1.3	1.7	1.8	1.9	2.0	p2.8c	p2.3c	p2.2c	2.1	1.9	1.8	1.3	...	2.3	2.8	3.3	...	...c	...c	...c	...c	...c	...c	3.8	2.3	1.2
19	1.2	q1.7c	p1.8c	p2.0c	p2.3c	p2.2c	2.2	2.1	p2.2c	2.3	1.8	1.5	...	2.3	p2.9c	...c	p3.7c	2.3	...	...c	...	...c	...	...	...	1.7
20	1.0	p1.7c	1.8	2.0	2.3	2.0	q2.7c	2.5	p2.2c	2.0	2.0	1.7	...	q3.0c	...c	...	3.1	...	...c	...c	...c	...c	...	3.0	2.4	...c
21	1.0	1.7	2.0	2.2	p2.2c	2.0	2.2	p2.3c	2.3	2.0	1.9	1.7	...	2.2	2.8	...	...c	...c	...c	...c	...c	...	3.5	3.2	...a	...a
22	...c	1.8	1.7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...c	3.0	...	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
23	...c	1.7	p1.8c	1.9	2.0	2.2	2.2	2.1	2.1	2.0	1.9	1.7	...	2.3	2.9	...c	...	...	...c	...c	...	3.7	3.9	3.2	...a	...c
24	1.2	1.3	1.8	1.8	2.3	q2.1c	p2.1c	2.1	2.0	2.0	1.8	1.2	...	2.3	2.8	3.3	...	...	...c	...c	...	...	...	3.0	2.5	...c
25	1.3	1.7	1.8	p1.9c	2.2	2.1	q2.5	2.4	2.0	2.0	1.8	1.3	...	2.2	2.8	3.3	...c	...	...	...c	...	...	...	3.0	2.5	1.4
26	...c	1.9	p1.9c	2.0	...c	...c	...c	...c	2.0	1.7	1.5	1.2	...	...	3.3	p3.4c	3.5	...c	...c	...c	...c	...	...	3.0	2.3	1.4
27	1.3	1.7	p1.8c	1.8	1.9	p2.4c	...c	...c	...c	2.1	p1.8c	1.4	1.2	2.2	2.9	...c	...	...	...	...	...	...	...	...c	...	...a
28	1.3	1.3	1.3	1.9	2.0	2.1	2.1	2.0	2.0	1.8	1.4	1.2	0.9	2.7	3.6	3.0	...	...	...	...	...	3.7	...	3.0	2.6	1.4
29	...c	2.0	p1.9c	1.9	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	2.1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
30	...c	...c	...c	...c	...c	2.0	1.9	2.0	1.9	1.8	1.4	1.2	...	...c	...c	...c	...c	...	...	...	3.9	3.6	3.4	2.9	2.5	1.7
31																										
MEDIAN*	1.2	1.7	1.8	1.9	2.0	2.1	2.2	2.2	2.1	2.0	1.8	1.3	...	2.2	2.9	3.3	3.5	...	...	...	...	3.6	3.4	3.0	2.4	1.3

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F_2 EQUAL TO OR LESS THAN f^0F_1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 383

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

DECEMBER 1945

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...c	...c	...c	...c	...c	...c	...c	...c	...c	11.6	11.9	11.9	11.9	11.1	10.3	10.1	10.0	p9.8c	...c	...c	...f	...c	...f	...f	...
2	...a	...f	...f	...f	p4.2f	3.0	6.7	8.8	9.9	9.3	8.4	8.3	8.5	8.7	9.3	10.0	10.1	10.2	p10.4c	p9.8c	p9.3c	8.2	...f	...f	...
3	...f	...f	...f	...f	...f	...f	6.6	8.1	9.0	8.9	8.7	8.7	9.0	9.5	10.2	11.1	11.6	p11.2c	...c	...c	...c	8.7c	...f	...f	...
4	...f	...f	3.7	2.6	p1.9c	2.9	6.0	8.2	9.0	8.5	8.5	8.8	...c	...c	...c	11.1	11.1	p11.2c	...f	...f	...f	...f	...f	...f	...
5	...f	...f	...f	...f	...f	p2.3c	6.7	8.6	9.4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
6	...c	...c	...c	...c	...c	...c	...c	...c	...c	p9.2c	9.5	10.0	p10.2c	...c	...c	...c	...c	...c	...c	...c	10.5	...c	...c	...c	...
7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.5	10.1	9.0	9.7	10.5	11.7	11.2	11.2	...c	...c	...f	...f	...f	...f	...
8	...f	...f	...f	...f	...f	...f	6.3f	8.7	10.1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
9	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.1h	8.3	8.1	8.4	8.8	9.3	9.9	10.3	10.3	p10.2c	p9.0c	...c	...f	...f	...f	...
10	...f	...f	...f	...f	...f	3.8	7.1	9.0	10.1	10.1	11.0	11.0h	10.0	9.9	10.0	p10.6c	10.7	10.3	10.8	11.0	p9.8c	p8.5c	6.9	...f	...
11	...f	...f	...f	p3.2c	...c	...c	...c	...c	...c	p9.8c	10.5	11.5	11.2	11.1	11.8	12.5	p12.2c	11.9	11.0	10.3	8.5	...f	...f	...f	...
12	...f	...f	...f	...f	...f	p3.9f	7.1	8.5	p9.2c	10.2	...c	...c	...c	...c	10.0	p8.5c	p9.3c	...c	...c	...c	...c	...c	...c	...c	...
13	...c	...c	...c	...c	...c	...c	6.8c	p8.4c	p9.9c	p10.0c	p10.3c	10.6	p10.4c	10.1h	9.7	9.5	9.2	8.7	9.0	p8.5c	...f	...f	...f	...f	...
14	...f	...f	...f	...f	...f	7.3	7.1	9.0f	9.3	9.3	9.9	p9.9c	9.9	10.7	10.8	11.5	11.6	11.3	p11.2c	10.5	p11.0c	9.8	...f	...f	...
15	...f	...f	...f	...f	...f	...f	7.3f	8.7	9.7	9.6	p9.5c	p9.4c	9.4	10.0	10.0	10.3	p10.2c	p10.0c	p10.3c	10.3	9.3f	...f	...f	...f	...
16	...f	...f	...f	...f	4.0	3.5	6.9	9.0	10.5	10.6	10.6	10.3h	9.4	9.3	9.5	10.2	p9.6c	p9.0c	8.4	p7.8c	7.5	...f	...f	...f	...
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	p10.9c	10.6	10.3	9.2	8.5	8.4	8.3	p8.0c	...f	...f	...
18	...f	...f	...f	...f	...f	...f	8.1	9.4	10.1	9.6	9.2	8.6	9.0	10.0	11.1	10.9	10.4	10.1	8.9	8.4	6.3	...f	...f	...f	...
19	...f	...f	...f	...f	2.9f	3.7f	p6.4c	8.8	10.3	11.0	10.7	10.1	9.9	9.7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
20	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.0	10.8	10.8	10.7	10.2	9.0	8.0	...f	...
21	...f	...f	...f	...f	...f	...f	6.3	8.6	9.6	9.6	9.1	8.7	9.4	9.4	9.6	10.8	11.0	10.8	10.5	p8.2c	...f	...f	...f	...f	...
22	...f	...f	p4.7f	4.7f	4.6	3.7	7.0	9.2	10.4	10.5	9.9	8.9	8.5	8.3	8.6	9.3	9.9	10.1	p10.3c	9.5	...c	...f	...f	...f	...
23	5.8f	4.0	3.0	2.5	2.2	2.6	6.3	p7.9c	p9.1c	10.2	10.1	8.4g	7.7g	7.5	8.1	8.8	9.1	9.2	11.1	p10.4c	p9.3c	p9.2c	9.0	7.0	7.4
24	6.4	5.1	...f	...f	...f	...f	p7.2c	8.6	10.1	10.6	11.2	11.2	p10.8c	11.0	11.3	10.5h	10.7h	11.2	11.5	11.3	10.3	8.7	...f	...f	...
25	...f	...f	...f	...f	...f	...f	6.4	8.3f	9.8	10.1	10.6	10.1h	8.1h	8.0h	8.1	9.1	10.0	9.7	9.8	9.4	8.3	7.4	7.3	8.7	...
26	8.2f	6.5	5.2	4.7	4.7	4.1	6.5	8.4	10.2	11.2	11.7	10.7	9.8h	9.4	9.3	9.7	10.4	10.8	10.7	10.1	9.1	...f	...f	...f	...
27	...f	...f	...f	...f	...f	...f	p6.6f	8.9	10.3	10.8	10.8	10.7	9.3	8.8	p9.4c	p9.4c	p9.8c	p10.2c	p10.4c	p10.4c	...f	...f	...f	...f	...
28	...f	...f	...f	...f	...f	...f	p6.0c	8.5	p11.6c	p10.4c	9.3h	8.7	9.5	10.5	10.2	10.4	10.4	10.6	9.8	9.3	8.6	8.7	7.3f	p7.4f	...
29	p7.5f	...f	...f	...f	4.9	3.0	6.2	8.3	8.8	9.9	9.5	9.3	9.0	9.0	9.5	9.9	10.2	10.7	11.0	11.3	9.6	8.3	8.1	7.7	...
30	...f	6.0	4.4	3.5	2.9	2.8f	5.3	7.8	8.9	9.6	9.3	9.3	8.8	8.5	8.1	8.9	9.3	9.0	8.4	7.2	5.4f	...f	...f	...f	...
31	...f	...f	...f	...f	...f	...f	5.2	7.8	9.5	10.1	10.2	9.9	9.8	10.2	10.5	11.3	11.7	11.2	11.0	10.5	8.9	8.7	9.1	p7.8f	...
MEDIAN*	7.0	5.6	4.4	3.4	4.0	3.3	6.6	8.6	9.8	10.1	10.0	9.9	9.4	9.6	10.0	10.2	10.3	10.3	10.4	10.0	9.2	8.7	8.0	7.7	8.2

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 384

DECEMBER 1945 DECEMBER 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...c	...c	...c	...c	...c	...c	...c	...c	...c	310	320	320	340	360	320	200	220	250	250	280	p410c	p320c	q240c	q320c	...
2	310a	300	300	250	220	250	240	220	320	320	340	350	380	380	300	300	210	250	280	310	350	380	390	340	304
3	340	330	p310c	300	230	230	250	230	230	320	330	380	330	330	210	220	220	260	270	310	p330c	q360c	320	300	289
4	250	240	250	270	300	300	250	220	210	320	350	350	...c	...c	...c	220	220	250	270	270	p300c	p340c	q380c	...c	...
5	...c	...c	...c	...c	...c	240	240	220	q250c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
6	...c	...c	...c	...c	...c	...c	...c	...c	...c	p340c	340	340	p320c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
7	...c	...c	...c	...c	...c	...c	...c	...c	...c	320	320	340	p390c	330	340	320	230	q270c	290	260	q310c	q380c	q390c	350	...
8	320	300	300	300	270	290	250	230	310	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
9	...c	...c	...c	...c	...c	...c	...c	...c	...c	310	330	380	340	340	340	210	230	240	260	300	350	q370c	370	330	...
10	330	340	340	300	240	240	250	230	280	300	360	330	360	350	320	200	210	240	270	260	320	360	380	330	298
11	380	330	260	220	...c	...c	...c	...c	...c	310	360	330	300	400	380	330	p250c	240	270	300	330	390	400	430	...
12	410	390	330	300	260	230	240	230	q220	300	...c	...c	...c	...c	390	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
13	...c	...c	...c	...c	...c	...c	...c	...c	q300c	q300c	...c	...c	...c	350	320	220	200	230	300	320	290	420	430	350	...
14	330	340	350	360	450	340	270	240	230	310	p330c	p360c	380	310	320	220	220	240	280	280	320	360	420	490	323
15	510	450	430	430	400	290	240	210	220	280	340	360	350	360	390	230	250	260	290	330	410	420	400	400	344
16	330	300	300	300	230	240	250	230	230	310	350	360	340	330	p340c	230	190	240	270	300	330	380	...c	...c	...
17	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	290	220	240	280	300	310	330	360	350	310	...
18	290	300	300	300	230	240	240	220	330	330	350	340	360	320	360	200	210	240	220	330	410	450	440	380	308
19	360	320	q330c	q320c	240	280	240	230	330	310	330	360	370	340	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
20	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	p420c	p370c	320	340	p290c	240	240	280	300	330	330	340	390	...
21	400	390	390	390	370	320	260	240	210	320	330	350	400	340	300	310	230	240	270	310	330	400	400	380	328
22	360	290	260	240	240	220	240	230	210	290	360	330	350	370	330	190	230	250	280	310	370	410	350	250	290
23	230	250	260	280	300	300	260	p230c	p280c	300	360	360	420	340	p340c	340	p240c	240	300	300	300	260	270	280	293
24	250	260	300	310	300	280	250	240	320	330	330	310	p380c	370	370	310	230	240	260	310	340	390a	390	410	312
25	410	400	340	330	300	270	260	240	300	310	350	400	400	390	320	230	220	240	270	280	340	340	290	270	312
26	240	240	260	260	240	250	260	230	300	300	320	320	340	340	330	210	230	230	270	310	380	410	400	370	293
27	330	300	280	270	260	260	240	230	300	300	350	340	350	370	p360c	q350c	...c	...c	...c	q410c	q410c	...c	...c	...c	...
28	...c	...c	q390c	q410c	...c	...c	...c	q360c	p350c	p330c	320	330	350	370	310	320	200	240	260	270	290	280	280	250	...
29	260	280	260	230	230	230	250	210	200	310	350	340	380	340	330	200	220	240	240	260	300	320	310	300	275
30	270	280	270	270	270	240	250	240	210	320	340	370	370	370	330	340	200	230	280	300	370	340	390	330	297
31	310	270	270	370	360	280	250	240	220	330	330	340	340	350	340	320	230	230	270	300	310	310	280	300	298
MEDIAN*	330	300	300	300	260	260	250	230	260	310	340	340	360	350	330	230	220	240	270	300	330	360	380	330	299

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 385

DECEMBER 1945 — DECEMBER 1945

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

CRITICAL FREQUENCY OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...c	4.7	4.9	5.0	5.0	5.0	4.7	...	...	...	...
2	...	...	4.5	4.7	4.9	4.9	4.9	5.0	4.6	4.5	...	...	...
3	...	...	...	4.7	4.9	5.0	4.9	4.8	...	...	...	...	...
4	...	...	...	4.8	4.9	4.9	...c	...c	...c	...	...	...	...
5	...	...	...c	...c	...c	...c	...c	...c	...c	...	...	...	...
6	...	...	...	p4.9c	4.8	4.8	p4.6c	...c	...c	...	...	...	...
7	...	...	...c	4.8	4.7	4.8	p5.0c	4.8	4.9	4.6	...	...	...
8	...	...	4.7	...c	...c	...c	...c	...c	...c	...c	...	...	...
9	...	...	...c	4.7	4.8	5.1	5.0	4.9	4.8	...	...	...	...
10	...	...	4.7	4.5	5.0	4.8	5.0	4.8	4.7	...	...	...	...
11	...	...	...c	4.7	4.9	4.8	4.7	5.0	5.0	4.8	...	...	...
12	...	...	...c	4.8	...c	...c	...c	...c	5.0	...c	...	...	...
13	...	...	p4.5c	p5.0c	...c	...c	...c	5.0	4.8	...	...	...	...
14	...	...	...c	4.9	...c	...c	4.7	4.8	4.8	...	...	...	...
15	...	...	...	4.7	5.0	5.0	5.0	5.1	5.0	...	...	...	...
16	...	...	...	4.7	5.0	5.0	4.9	5.0	...	...	...	...	...
17	...	...	...c	...c	...c	...c	...c	...c	4.6	...	...	...	...
18	...	...	4.8	5.2	5.0	5.2	5.1	5.0	5.0	...	...	...	...
19	...	...	4.9	4.8	4.8	5.1	5.1	4.9	...c	...	...	...	...
20	...	...	...	...c	...c	p5.2c	p5.0c	4.8	5.0	...c	...	...	...
21	...	...	...	4.7	4.8	5.0	5.3	4.9	4.6	4.6	...	...	...
22	...	...	...	4.6	5.0	5.2	5.0	5.0	4.7	...	...	...	...
23	...	...	...	4.6	4.8	4.8	5.0	4.7	...c	4.5	...	...	...
24	...	...	5.2	5.3	4.8	4.8	p5.0c	5.0	4.8	4.5	...	...	...
25	...	...	4.5	4.8	4.8	4.9	4.9	p4.8c	4.6	...	...	...	...
26	...	...	4.5	4.6	4.7	4.8	4.7	4.6	4.7	...	...	...	...
27	...	...	4.6	4.6	4.7	4.8	4.8	4.8	...c	...c	...	...	...
28	...	...	...	...c	4.7	4.9	4.8	4.8	4.6	4.5	...	...	...
29	...	...	...	4.6	4.8	4.7	4.9	4.7	4.6	...	...	...	...
30	...	...	...	4.6	4.7	4.7	4.8	4.7	4.6	4.5	...	...	...
31	...	...	...	4.6	4.7	4.8	4.7	4.8	4.7	4.5	...	...	...
MEDIAN*	...	...	4.6	4.7	4.8	4.9	4.9	4.8	4.7	4.5	...	...	...

MINIMUM VIRTUAL HEIGHT OF FI REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...c	210	210	210	220	200	200	...	...	...	...
2	...	...	220	210	210	200	200	200	200	200	...	...	...
3	...	...	...	220	210	220	210	200	...	...	...	...	...
4	...	...	...	220	220	200	...c	...c	...c	...	...	...	...
5	...	...	...c	...c	...c	...c	...c	...c	...c	...	...	...	...
6	...	...	...	p210c	230	200	p200c	...c	...c	...	...	...	...
7	...	...	...c	210	200	200	p200c	190	200	200	...	...	...
8	...	...	210	...c	...c	...c	...c	...c	...c	...c	...	...	...
9	...	...	...c	220	200	200	200	220	200	...	...	...	...
10	...	...	220	210	210	210	210	190	200	...	...	...	...
11	...	...	...c	200	200	200	200	200	210	210	...	...	...
12	...	...	...c	200	...c	...c	...c	...c	210	...c	...	...	...
13	...	...	p210c	p200c	...c	...c	...c	200	200	...	...	...	...
14	...	...	...c	200	...c	...c	200	190	200	...	...	...	...
15	...	...	...	210	p200c	200	220	220	210	...	...	...	...
16	...	...	...	200	210	200	200	190	...	...	...	...	...
17	...	...	...c	...c	...c	...c	...c	...c	200	...	...	...	...
18	...	...	220	210	210	210	200	210	210	...	...	...	...
19	...	...	230	210	210	210	200	210	...c	...	...	...	...
20	...	...	...c	...c	...c	...c	...c	220	...c	...c	...	...	...
21	...	...	...	220	210	200	200	200	190	210	...	...	...
22	...	...	...	300	200	200	210	190	200	...	...	...	...
23	...	...	...	200	200	200	210	200	...c	...c	...c	...	...
24	...	...	210	...c	...c	...c	p210c	200	210	210	...	...	...
25	...	...	210	210	210	200	200	p220c	200	...	...	...	...
26	...	...	220	210	210	210	200	210	210	...	...	...	...
27	...	...	210	210	200	190	200	200	...c	...	...	...	...
28	...	...	...	...c	200	200	200	210	200	210	...	...	...
29	...	...	...	200	190	210	200	200	180	...	...	...	...
30	...	...	...	200	200	200	200	200	200	210	...	...	...
31	...	...	...	190	210	200	200	200	210	210	...	...	...
MEDIAN*	...	...	220	210	210	200	200	200	200	210	...	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 386

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

DECEMBER 1945

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...c	...c	...c	1.7	1.8	1.8	1.9	1.9	1.7	1.8	1.7	1.1	...
2	0.9	1.0	1.7	1.7	2.3	1.9	1.9	2.5	1.8	1.8	1.5	0.9	...
3	1.0	1.1	1.7	1.7	1.7	1.9	1.8	1.7	1.9	2.0	1.2	1.0	...
4	0.9	1.2	1.3	1.9	1.8	1.9	...c	...c	...c	1.7	1.7	...c	...
5	0.9	1.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
6	...c	...c	...c	p2.5c	2.5	2.5	...c	...c	...c	...c	...c	...c	...
7	...c	...c	...c	...c	2.5	2.5	p2.7c	2.7	2.7	2.6	2.4	...c	...
8	0.9	1.7	1.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
9	...c	...c	...c	1.3	2.5	2.6	p2.9c	2.7	2.5	2.6	p2.7c	1.2	...
10	0.8	1.1	p1.7c	2.4	2.5	2.5	2.6	1.9	2.6	2.5	1.4	1.2	...
11	...c	...c	...c	3.0	p2.6c	2.6	p2.6c	2.5	2.6	2.5	p1.7c	1.1	...
12	0.8	1.0	...c	2.5	...c	...c	...c	...c	2.6	...c	...c	...c	...
13	...c	...c	q1.2c	p2.5c	...c	...c	...c	...c	2.6	2.0	1.2	1.1	...
14	1.0	1.1	1.8	1.5	p1.6c	p1.7c	1.8	1.8	1.7	1.7	p1.4c	0.9	...
15	0.8	1.1	1.2	1.7	p1.8c	1.9	1.9	1.9	1.8	1.7	...c	...c	...
16	1.0	1.0	1.0	p1.5c	p2.1c	2.7	2.7	2.7	p2.7c	2.7	...c	...c	...
17	...c	...c	...c	...c	...c	...c	...c	...c	1.8	2.0	p1.7c	1.1	...
18	0.8	1.4	1.7	1.9	1.9	p1.8c	1.9	2.0	1.9	1.8	1.8	1.6	0.9
19	1.0	1.5	2.5	1.7	1.8	1.9	2.0	1.8	...c	...c	...c	...c	...
20	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	1.7	1.2	0.9
21	p1.3c	p1.6c	2.3	1.7	1.8	1.8	2.0	p1.9c	1.9	1.8	1.7	1.1	...
22	1.0	1.5	2.5	1.7	1.8	1.8	1.9	2.5	2.6	2.5	2.5	...	...
23	1.0	p0.9c	p1.7c	1.7	1.9	1.9	...c	...c	...c	...c	...c	...c	...c
24	1.2	p1.4c	1.7	2.0	2.0	2.2	p1.7c	1.7	1.7	1.8	p1.5c	p1.3c	...
25	p0.9c	p1.7c	1.0	1.0	1.8	1.8	1.8	1.7	1.7	1.6	1.4	1.3	1.2
26	0.9	1.2	1.1	1.3	1.7	1.8	1.8	1.8	1.7	1.7	1.2	0.9	...
27	0.9	1.2	p1.3c	1.7	1.7	1.9	1.9	1.8	...c	...c	...c	...c	...
28	...c	...c	...c	...c	1.8	1.9	1.9	1.8	1.3	1.5	0.9	0.8	0.9
29	0.9	1.1	1.2	1.3	1.4	1.8	1.7	1.7	1.7	1.3	1.1	1.1	0.7
30	0.9	0.9	1.2	1.6	1.8	1.8	1.8	1.7	1.4	1.8	1.0	0.8	0.9
31	0.9	0.9	1.0	1.3	1.4	1.8	1.7	1.7	1.7	1.8	1.7	1.1	0.8
MEDIAN*	0.9	1.1	1.3	1.7	1.8	1.9	1.9	1.8	1.8	1.8	1.6	1.1	0.8

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...c	...c	...c	3.5	3.6	...	4.0	...	3.7	3.3	2.9	2.4	1.5
2	2.1	2.8	...	3.5	3.7	...	...	3.7	...	...	3.0	2.4	1.5
3	2.1	2.8	3.3	3.5	3.6	3.9	...	3.5	3.5	3.5	3.0	...	...
4	2.1	2.8	...	...	...	...	...c	...c	...c	3.5	...	2.5	...
5	2.3	2.8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
6	...c	...c	...c	p3.6c	3.6	3.9	...	...c	...c	...c	...c	...c	...
7	...c	...c	...c	...	...	3.7	...c	...	...	...	...	...	...
8	2.1	2.7	3.0	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
9	...c	...c	...c	...	3.7	...	...	...	...	...	2.9	2.7	...
10	2.2	2.9	3.2	...	...	...	...	3.8	...	...	3.0	2.5	...
11	...c	...c	...c	3.4	...	...	...	...	3.9	3.5	...c	2.5	...
12	2.3	2.8	p3.0	...	...c	...c	...c	...c	...	...c	...c	...c	...
13	...c	...c	...	...	...c	...c	...c	...	3.7	3.5	...	2.4	...
14	2.0	2.7	...	3.5	...c	...c	...	...	3.7	3.5	p3.0c	2.4	...
15	2.2	2.9	3.1	3.6	...	4.0	...	...	...	3.0	...c	...c	...
16	2.2	2.8	3.4	3.6	...	4.0	...	3.8	...c	3.5	3.0	2.5	1.4
17	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...c	2.8	...
18	2.2	2.7	...	...	...	...	...	...	...	3.6	3.0	2.8	1.8
19	2.1	2.8	3.4	3.6	...	4.1	...	...	...c	...c	...c	...c	...
20	...c	...c	...c	...c	...c	...c	...c	4.0	...c	...c	3.0	2.6	...
21	2.2f	2.6	3.2	3.6	...	...	4.1	...	3.6	...	3.0	...	1.7
22	1.9	2.6	3.3	3.6	3.7	...	...	3.7	3.8	3.4	3.0	p2.5c	...
23	2.0	p2.6c	p3.5c	3.8	3.9	...	...c	...c	...c	...c	...c	...c	...
24	2.0	2.7	...	...c	...c	...c	p3.8c	3.7	3.6	...	3.3	2.5	1.7
25	2.0	2.7	3.3	3.5	3.6	3.3	3.8	...c	...	3.1	3.0	2.5	1.9
26	1.9	2.8	3.2	3.5	3.7	...	...	3.7	3.5	3.5	3.1	2.6	...
27	1.9	2.6	3.0	3.5	...	...	...	...	...c	...c	...c	...c	...
28	...c	...c	...c	...c	3.6	3.8	3.6	3.7	3.6	3.4	3.0	2.6	1.6
29	2.1	2.6	3.0	3.7	3.5	3.8	3.6	3.6	3.6	3.4	3.0	...a	...a
30	1.9	2.9	3.0	3.5	...	...	3.7	...	3.6	3.5	3.0	2.4	1.7
31	1.9	2.8	3.2	3.4	3.7	3.6	3.8	3.8	3.8	...	3.0	2.7	1.9
MEDIAN*	2.1	2.8	3.2	3.5	3.6	3.8	3.8	3.7	3.6	3.5	3.0	2.5	1.7

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 387

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1946 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — JANUARY 1946

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...f	...f	...f	...f	...f	...f	6.1	3.2	p8.7c	...c	...c	...c	...c	...c	9.0	10.2	10.6	11.7	10.8	10.1	...f	...f	...f	...f	...
2	...f	...f	p4.9f	4.0f	3.7	p4.0f	5.4	7.6	9.9	10.2	p10.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	p8.6c	p7.4f	...f	...f	...
3	...f	...f	...f	p3.6f	1.4b	2.0b	5.5	8.1	7.0	8.3	9.3	7.6h	7.3	10.7	9.6	9.5	10.0	10.5	11.5	10.7	10.0	8.5	...f	...f	...
4	...f	...f	...f	...f	...f	...f	5.9	8.5	9.2	10.0	9.6	9.6	9.2h	9.4h	10.1h	10.4	10.4	10.0	9.2	9.3	9.1	8.1	p8.0f	...f	...
5	...f	...f	...f	...f	...f	4.2f	6.0	8.3	8.8	9.0	7.5	7.4	7.6	8.2	8.6	9.3	10.5	10.5	10.4	9.8	8.5	...f	...f	...f	...
6	...f	...f	...f	...f	...f	p2.1f	5.5	7.6	9.0	9.8	10.3	10.3h	9.5h	8.5	9.2	10.3	11.4	11.2	10.7	10.4	9.3	7.9	...f	...f	...
7	...f	...f	...f	...f	...f	p2.6f	5.6	7.6	8.2	8.4	p7.8c	7.3	7.3	7.4	8.2	9.4	10.6	9.8	9.6	9.3	7.8	6.8	p5.7f	p4.6f	...
8	...f	...f	...f	...f	...f	...f	5.7	7.7	8.7	8.4	9.0h	7.8	7.8	7.8	7.9	8.5	9.0	9.6	9.8	9.0	7.9	7.4	p6.7c	...f	...
9	...f	...f	...f	...f	3.0f	2.4f	5.1	7.4	8.6	8.8	9.1	p9.5c	p10.2c	p10.9c	11.6	11.5	9.7	8.8	8.3	7.8	7.7	8.6	...f	...f	...
10	...f	...f	...f	...f	...f	p2.6f	5.2	7.2	8.7	8.5	8.0	7.5h	7.4	8.1	9.1	9.1	9.4	9.4	9.8	9.5	8.2	7.7	...f	...f	...
11	...f	...f	...f	...f	...f	...f	p4.3c	7.9	9.5	10.2	10.9	11.1	9.7	10.5	11.2h	11.9h	11.3	11.3	11.0	10.5	8.9	7.2	...f	...f	...
12	...f	...f	...f	...f	...f	...f	p5.6f	7.8	8.8	9.7	9.8	9.1	8.7	8.5	8.7	9.3	9.6	10.0	10.2	10.3	9.0	7.1f	...f	...f	...
13	...f	...f	...f	...f	...f	...f	5.0	7.3	8.6	9.2	9.0	8.8	9.0	8.8	9.8	10.5	10.2	10.3	10.8	9.8	...f	...f	...f	...f	...
14	...f	...f	...f	...f	...f	...f	5.3	7.8	8.8	9.4	9.4	8.7	9.3	10.1	10.8	10.9	10.3	9.9	9.8	9.5	8.3	...f	...f	...f	...
15	...f	...f	...f	p3.0f	2.4f	p2.0f	4.7	7.1	7.9	7.7	7.4	7.4	8.0	8.9	9.6	9.7	9.7	10.2	9.8	9.1h	7.7h	...f	...f	...f	...
16	...f	...f	...f	...f	...f	...f	5.0	7.4	8.7	9.3	9.2	8.6	9.3	10.1	11.9	10.8	9.6	9.1	9.1	8.6	7.4	7.2	...f	...f	...
17	...f	...f	...f	...f	2.3f	2.1f	4.7	6.6	7.6	7.8	7.7	8.0	8.5	9.2	p10.0c	10.4	10.5	9.8	9.8	9.1	7.4f	...f	...f	...f	...
18	...f	4.7f	3.2	2.1	2.1	1.9f	5.3	7.8	8.7	8.2	7.5	7.8	8.8	9.8	10.7	10.1	10.2	10.2	9.8	8.8h	...f	...f	...f	...f	...
19	...f	...f	...f	...f	p3.8c	3.1	p5.5c	7.4	8.6	8.8	9.1	9.0	9.5	10.6	11.8	11.0	11.1	11.0	11.2	p10.3c	...f	...f	...f	...f	...
20	...f	p7.4f	3.1	2.8	2.2	1.5	5.0	7.7	8.7	8.0	7.4	7.6	8.2	8.8	9.4	9.8	10.1	10.2	10.2	9.6	...f	...f	...f	...f	...
21	...f	...a	...f	...f	...f	3.2f	5.5	7.9	8.7	8.4h	7.5	7.1	7.6	8.0	8.7	9.5	10.0	10.1	9.7	9.7	8.4	7.0	6.5	5.6f	...
22	4.5f	2.9f	p2.8f	...f	...f	...f	5.3	7.7	8.9	9.4	9.6h	8.5	8.2	8.2	8.5	9.5	10.0	10.2	10.4	10.0	p8.2f	...f	...f	...f	...
23	...f	...f	...f	...f	3.7	p2.4f	5.3	7.9	8.3	8.8	9.6h	8.3	8.2	8.8	8.7	9.2	9.2	9.4	9.2	9.2	9.6	p7.3f	...f	...f	...
24	...f	...f	p5.2f	4.4f	4.0f	...f	p5.2f	p8.3f	9.1f	10.2	10.2	10.5	9.9	10.0	9.2	9.4	10.0	11.0	10.9	10.2	...f	...f	...f	...f	...
25	...f	...f	p5.8f	3.9	2.3f	2.1f	4.3	6.9	7.9	8.3	7.8	7.6	8.1	8.7	9.2	9.1	8.8	8.4	8.5	9.0	8.5	9.0	9.0	p8.7f	...
26	...f	5.0	4.4	3.6	2.2	1.4	4.8	7.5	8.7	8.9	8.6	8.5	8.8	9.2	9.5	10.6	11.4	11.2	10.7	9.2h	...f	...f	...f	...f	...
27	...f	...f	p4.5f	3.2	2.8	2.2f	5.0	7.5	8.6	9.5	9.2	8.9	8.9	9.2	10.2	11.1	11.9	11.2	11.0	11.2	9.5	...f	...f	...f	...
28	...f	...f	4.4f	3.9	3.2	2.4f	4.9	7.4	8.4	p8.3c	8.2	8.5	8.7	9.5	10.5	10.7	10.7	10.3	10.4	9.5	p8.4f	...f	...f	...f	...
29	...f	...f	...f	...f	...c	...c	...c	...c	...c	8.6h	8.4	9.0	9.7	10.4	11.2	11.8	12.0	11.8	11.8	11.2	10.4	9.6	8.3	7.8	...
30	6.8	5.0	3.2	2.1	1.6b	1.3b	4.7	7.9	9.2	10.0	10.0	9.6	9.3	9.4	10.2b	...b	11.6b	11.8	11.5	11.4	11.3	10.2	10.9f	10.7	...
31	8.8	6.5	3.6	2.4f	p2.2f	p1.7f	...c	...c	...c	p8.6c	8.8	8.9	9.5	p9.5c	9.5	p9.0c	8.5	...c	...c	...c	...c	...c	...c	...c	...
MEDIAN*	...f	5.0	4.4	3.4	2.4	2.2	5.3	7.7	8.7	8.8	9.0	8.5	8.8	9.2	9.6	10.1	10.2	10.2	10.2	9.6	8.5	7.6	8.0	7.8	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 388

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1946 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS JANUARY 1946

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED—75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	300	350	360	390	330	290	240	230	220	...c	...c	...c	...c	...c	320	320	350	240	260	300	310	380	360	310	...
2	240	260	250	270	280	320	240	210	300	310	p330	...c	...c	...c	...c	...c	...c	...c	...c	...c	320	370	360	330	...
3	280	260	250	240	240	370	250	230	230	290	330	p380	420	330	210	370	240	240	280	280	320h	390	520	410	307
4	400	410	400	300	270	370	260	240	220	300	340	380	350	400	350	320	320	220	270	270	290	330	340	320	320
5	310	260	290	290	270	250	250	230	200	390	400	400	420	380	350	330	210	220	250	290	330	370	400	400	312
6	360	330	340	370	280	260	240	230	210	320	340	370	400	360	350	310	300	230	250	240	280	350	380	410	313
7	370	390	340	300	270	240	240	220	310	370	p390c	410	400	350	380	320	310	p300c	290	280	320	320	330	410	328
8	370	340	350	360	310	250	250	230	310	400	360	380	400	430	q410c	340	240	240	260	270	310	340	380	390	330
9	340	320	300	250	230	240	240	240	300	330	380	p370e	p370e	p360e	360	330	310	...a	260	280	310a	330a	240	260	...
10	260	290	300	280	240	260	260	240	330	370	400	380	420	420	370	360	360	330a	290	270a	320	350	400	410	330
11	460	480	420	450	400	310	p260c	230	300	320	340	360	350	400	350	330	210	270	280	310	360	370	380	350	345
12	380	390	420	370	320	260	260	230	220	320	340	410	400	390	350	350	330	170	260	280	320	410	410	410	333
13	430	470	430	330	230	220	250	230	310	340	400	400	370	410	370	350	180	240	270	320	380	430	490	500	348
14	470	480	330	240	240	260	260	220	220	330	370	380	360	350	330	350	350	240	280	280	330	410	430	440	331
15	420	380	310	230	260	280	260	230	310	350	410	410	420	390	370	370	230	230	260	290	300	400	400	430	331
16	530	460	310	270	260	270	260	230	230	340	370	340	390	350	320	320	300	250	260	290	310	340	340	350	320
17	360	430	330	240	260	280	270	230	340	340	360	400	400	360	340	330	320	230	270	300	350	340	340	300	322
18	260	230	220	250	240	260	260	220	210	200	340	340	390	380	340	340	210	240	250	320	360	370	330	300	286
19	290	290	270	250	240	250	270	220	210	360	330	360	370	360	340	330	230	240	280	320	360	430	390	330	305
20	270	240	250	260	240	270	260	230	320	340	370	400	410	380	360	360	340	230	260	310	240	280	390	340	306
21	270	220	220	220	230	230	250	280	390	400	430	440	430	410	400	360	340	250	260	260	280	320	310	240	310
22	230	250	290	290	300	310	260	240	280	360	380	400	400	420	440	380	330	240	270	320	400	420	360	320	329
23	310	240	270	240	230	250	250	220	290	380	400	420	410	370	310	330	350	250	260	290	320	410	400	310	313
24	250	240	260	270	300	290	260	230	220	340	360	360	390	400	370	390	340	230	250	310	360	280	310	300	305
25	300	240	230	230	240	240	270	240	210	350	400	400	410	400	390	380	200	190	260	280	320	320	270	250	292
26	240	230	220	230	240	280	260	220	210	320	370	390	390	370	360	360	200	230	260	310	350	330	350	310	293
27	300	250	230	220	260a	260	250	230	210	350	380	380	360	370	360	340	310	240	270	280	330	400	380	380	306
28	290	250	240	230	230	240	260	240	210	p340c	380	380	390	370	350	350	220	240	270	310	360	300	310	240	292
29	290	260	230	230	...c	...c	...c	...c	...c	330	370	340	360	360	350	360	340	250	270	300	320	290	290	260	...
30	250	230	220	230	260	300	270	250	230	330	340	360	330	400	...b	...b	...b	...b	270	300	320	330	320	320	...
31	240	210	230	240	230	260	...c	...c	...c	340	370	400	340	p360c	370	p360c	350	...c	...c	...c	...c	...c	...c	...c	...
MEDIAN*	300	260	290	250	260	260	260	230	230	340	370	380	390	380	350	350	310	240	260	290	320	350	360	330	307

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 389

JANUARY 1946

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JANUARY 1946

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...c	...c	...c	...c	...c	...c	4.6	4.6	...	...	...
2	...	...	4.7	p4.7c	p4.8c	...c	...c	...c	...c	...c	...c	...	...
3	...	...	...	4.7	4.7	p4.7	p4.8c	4.8	...c	...	...c	...	...
4	...	...	...	4.7	4.9	4.9	4.9	5.0	4.7	4.5	4.5	...	...
5	...	...	...	4.7h	4.8	4.8	p4.8	4.8	4.8	4.4	...	...	...
6	...	...	...	4.7	4.8	5.1	4.9	4.9	4.9	4.6	4.5	...	...
7	...	...	4.7	4.6	p4.7c	4.8	4.8	4.7	4.8	4.5	4.4	...	...
8	...	...	4.5	4.9	4.7	4.7	4.9	4.8	4.7	4.5	...	...	...
9	...	...	4.6	4.6	4.7	p4.6	p4.7c	p4.8c	4.8	4.6	...	...	...
10	...	...	4.6	4.7	4.8	4.7	4.7	4.7	4.8	...	...	...	...
11	...	...	4.7	4.7	4.5	4.7	4.7	4.8	4.7	4.5	...	...	...
12	...	...	...	4.6	4.7	4.8	4.8	4.8	4.7	4.6	4.6	...	...
13	...	...	4.9	4.7	4.8	4.8	4.9	5.0	4.8	4.6h	...	...	...
14	...	...	...	4.8	4.9	5.0	4.9	4.8	4.9	4.8	5.0	...	...
15	...	...	4.6	4.8	5.0	5.1	5.0	5.0	4.8	4.9	...	...	...
16	...	...	...	4.8	5.0	5.0	5.1	5.0	4.9	4.7	4.4	...	...
17	...	...	4.6	4.7	5.0	5.1	5.0	5.0	5.0	4.8	4.8	...	...
18	...	...	...	...	4.9	4.9	5.2	5.0	5.0	4.7	...	...	...
19	...	...	...	5.1	4.9	5.1	5.3	5.1	5.0	4.8	...	...	...
20	...	...	4.8	4.9	4.9	5.1	5.1	5.0	4.8	4.8	5.0	...	...
21	...	...	5.0	5.0	4.9	4.9	5.0	4.9	4.9	4.8	4.5	...	...
22	...	...	4.6	4.9	4.8	4.8	4.9	5.0	5.1	4.9	4.8	...	...
23	...	...	...	5.0	4.9	5.0	4.9	4.9	4.7	4.6	4.6	...	...
24	...	...	...	4.7	4.7	4.9h	5.0	4.9	4.8	4.7	4.7	...	...
25	...	...	...	4.7	5.0	5.0	5.0	4.9	4.8	4.7	...	...	...
26	...	...	...	4.8	4.9	4.9	4.9	4.9	5.0	4.9	...	...	...
27	...	...	...	4.8	4.9	5.0	5.0	4.9	4.8	4.7	...	...	...
28	...	...	...	...c	4.9	5.0	5.0	4.9b	4.8	4.8	...	...	...
29	...	...	...c	4.8	5.1	4.9	5.0	5.1	5.1	5.0	5.0	...	...
30	...	...	...	4.9	5.0	5.2	5.0	5.3	...b	...b	...b	...	...
31	...	...	...c	5.0	5.1	5.3	5.2	p5.1c	5.1	p5.0c	4.8	...	...
* MEDIAN	...	...	4.6	4.8	4.9	4.9	4.9	4.9	4.8	4.7	4.6	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...c	...c	...c	p220c	p220c	p210c	210	200	210	...	...
2	...	...	200	200	p220c	...c	...c	...c	...c	...c	...c	...	...
3	...	...	...	220	220	210	220	210	p220c	230	...	...	...
4	...	...	...	210	210	200	200	210	210	200	200	...	...
5	...	...	...	220	220	200	210	200	p220c	200	...	...	...
6	...	...	...	210	210	190	190	200	200	190	210	...	...
7	...	...	200	210	p210c	200	190	200	200	190	220	...	...
8	...	...	230	210	200	200	200	200	p200c	200	...	...	...
9	...	...	220	210	200	p200c	p200c	p200c	200	200	220	...	...
10	...	...	230	210	210	200	200	200	200	190	200	...	...
11	...	...	190	220	200	200	180	190	200	210	...	...	...
12	...	...	...	210	200	210	200	200	200	200	190	...	...
13	...	...	210	220	210	240	200	200	200	200	...	...	...
14	...	...	...	210	200	210	210	200	200	200	210	...	...
15	...	...	220	200	200	200	190	200	210	210	...	...	...
16	...	...	...	210	200	200	200	210	200	200	230	...	...
17	...	...	210	200	200	200	200	200	200	200	200	...	...
18	...	...	...	...	200	180	p230c	220	180	p200c	...	...	...
19	...	...	...	210	200	230	200	200	180	200	...	...	...
20	...	...	230	210	200	200	210	200	200	220	200	...	...
21	...	...	210	200	200	210	180	200	200	200	210	...	...
22	...	...	230	220	200	200	200	200	200	200	230	...	...
23	...	...	220	210	200	200	210	200	190	190	210	...	...
24	...	...	...	210	200	210	200	200	200	200	240	...	...
25	...	...	...	200	200	200	200	200	220	230	...	...	...
26	...	...	...	200	210	200	210	200	200	210	...	...	...
27	...	...	...	210	200	210	200	200	210	200	200	...	...
28	...	...	...	...c	200	210	200	230b	200	190	...	...	...
29	...	...	...	210	200	220	210	210	230	...b	...b	...	...
30	...	...	...	230	200	220	200	200	...b	...b	...b	...	...
31	...	...	...c	210	210	200	200	p200c	210	p220c	230	...	...
* MEDIAN	...	...	220	210	200	200	200	200	200	200	210	...	...

* = ALL TABULATED VALUES　a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E　b = LOSS OF RECORD DUE TO ABSORPTION　c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER　e = BELOW LOWER LIMIT OF RECORDER　f = SPREAD ECHOES PRESENT　g = f^0F2 EQUAL TO OR LESS THAN f^0F1　h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY　k = IONOSPHERIC STORM IN PROGRESS　p = INTERPOLATED VALUE　q = DOUBTFUL VALUE

TABLE 390

JANUARY 1946 JANUARY 1946

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0.9	1.1	1.0	p1.2c	p1.3c	1.3	p1.8c	p1.8e	2.4	1.0	1.3	p1.0c	0.9
2	0.7	0.7	1.1	1.2	p1.7c	...c	...c	...c	...c	...c	...c	...c	...c
3	0.9	1.1	1.2	1.7	1.7	1.7	1.8	1.9	1.7	1.7	1.2	0.7	1.0
4	0.8	0.8	1.1	1.3	p1.4c	1.8	1.8	1.8	1.7	1.4	1.1	0.7	0.7
5	0.8	0.7	1.1	1.1	p1.4c	2.0	2.1	1.8	2.0	1.7	1.2	1.1	0.9
6	0.9	0.9	1.1	1.7	1.8	1.8	1.7	1.8	1.8	1.3	1.1	0.7a	0.7a
7	0.9	0.7	0.8	1.2	p1.3c	1.4	1.7	1.8	1.4	1.8	1.1	0.9	...
8	0.9	1.1	1.2	1.2	1.7	1.4	1.4	1.7	p1.5c	1.2	1.2	1.0	0.8
9	0.7	0.7	1.1	1.1	1.7	p1.7c	p1.6c	p1.6c	1.5	1.7	1.0	0.7	0.7
10	1.0	0.7	1.2	1.2	1.4	1.4	1.4	1.4	1.4	1.2	p1.0c	0.7	0.7
11	p0.9c	0.7	1.0	1.4	1.3	1.7	1.8	1.8	1.7	1.2	1.2	0.8	0.7
12	0.8	1.0	1.1	1.4	1.4	1.8	1.3	1.8	1.7	1.1	1.0	0.9	0.7a
13	0.7	1.0	1.1	1.7	1.8	p1.8c	1.8	1.8	1.8	1.4	1.7	1.1	0.7
14	0.8	0.9	1.2	1.2	1.2	1.9	1.8	1.8	1.9	1.9	1.8	1.1	1.2
15	0.8	1.0	1.7	1.7	1.8	1.8	1.8	1.9	1.8	1.8	1.7	0.9	0.9
16	0.9	1.1	1.8	1.7	1.8	1.9	2.0	2.0	1.8	1.8	1.4	1.1	1.2
17	0.7	0.7	1.0	1.7	1.8	1.9	1.9	1.9	1.9	1.7	1.3	1.1	1.0
18	0.8	0.9	1.1	1.3	1.4	2.7	p2.7c	p2.8c	p2.6c	p2.5c	1.7	1.6	1.7
19	...c	0.7	1.2	1.7	1.8	2.7	2.1	2.0	2.0	1.9	1.7	1.3	1.0
20	0.8	0.7	1.1	1.4	1.8	2.4	2.1	1.9	1.9	1.7	1.7	1.3	1.0
21	0.7	1.4	1.8	1.7	1.7	1.8	1.8	1.9	1.9	1.8	1.7	1.2	1.0
22	0.8	1.0	1.2	1.2	1.7	1.7	1.9	1.8	1.8	1.7	1.7	1.2	1.1
23	0.9	1.1	1.0	1.4	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.2	1.1
24	0.9	0.8	1.2	1.7	1.8	1.8	2.1	1.8	1.8	1.7	1.9	1.2	0.9
25	0.7	0.8	1.2	1.9	1.8	2.2	2.0	2.2	2.0	1.4	1.2	1.0	1.0
26	0.7	0.8	1.1	1.7	1.7	1.9	2.0	1.9	2.0	1.7	1.4	1.1	0.8
27	0.9	1.2	1.3	1.4	1.8	1.8	2.0	2.0	2.0	2.1	1.8	1.3	1.1
28	0.9	1.0	1.3	p1.7c	1.8	1.8	2.0	...b	2.1	1.9	1.2	1.1	0.9
29	...c	...c	...c	2.0	2.2	2.7	2.5b	...b	...b	2.3	...b	...b	1.7
30	1.1	1.4	1.9	2.1	q3.7c	p3.8c	p3.7c	4.0b	...b	...b	...b	...b	1.8
31	...c	...c	...c	2.2	...c	...c	...c	...c	...c	...c	2.0	...c	...c
MEDIAN*	0.8	0.9	1.1	1.7	1.7	1.8	1.8	1.8	1.8	1.7	1.4	1.1	1.0

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2.0	2.7	3.0	p3.3c	p3.6c	3.6	p3.6c	p3.7c	3.7	3.3	3.0	2.5	1.9
2	2.0	2.5	2.0	3.3	p3.7c	...c	...c	...c	...c	...c	...c	...c	...c
3	2.0	2.7	3.1	3.4	3.7	...	...	...	...	...	...	2.4	1.7
4	1.9	2.6	3.0	3.5	3.8	3.8	...	3.7	...	3.4	3.0	2.4	1.8
5	1.9	...a	3.1	3.4	...c	...	...	...	...	...c	...	2.6	1.9
6	2.2	2.6	3.0	3.4	...	3.7	3.8	...	...	3.4	...a	2.6	2.0
7	2.0	2.7	3.3	3.5	...c	...	3.8	...	...	...	3.0	...c	...c
8	2.1	2.6	3.2	...c	3.7	3.8	3.7	3.7	...c	3.4	3.0	2.5	1.7
9	2.0	2.6	3.2	3.5	3.7	p3.7c	...c	...c	3.6	3.5	...	...a	1.8
10	2.0	2.6	...	...	...	3.7	...	...	3.6	3.5	3.0	...a	...a
11	p1.7c	2.7	3.0	3.6	3.6	...	3.7	3.8	3.6	3.7	3.3	...a	...a
12	1.9	2.5	3.0	3.5	3.7	3.7	3.8	...e	...	3.3	3.0	2.6	1.9
13	1.7	2.8	3.5	3.8	...	...	4.0	...	3.7	3.6	3.3	2.8	1.9
14	2.0f	2.0	3.3	3.5	3.8	...	...	...	3.9	3.5	3.4	2.7	2.0
15	1.9	2.7	3.3	3.7	3.9	...	4.0	...	...	...	3.4	2.7	2.0
16	1.9	2.7	3.4	3.6	3.8	...	...	...	...	3.5	3.5	2.5	...f
17	...f	2.7	3.1	...	3.8	...	...	...	...	3.5	...	2.7	1.9
18	2.0	2.7	3.1	3.5	...	...	...c	3.8	...c	...	3.4	2.6	2.1
19	p2.0	2.6	3.2	3.7	...	...	...	...	3.7	3.8	3.4	2.8	2.0
20	1.9	2.7	3.2	3.4	...	...	...	...	...	...	...	2.7	1.9
21	2.0	2.7	3.1	...	...	...	...	...	...	3.8	3.4	2.7	1.8
22	1.8	2.7	3.2	3.7	3.0	...	...	...	...	3.7	...	2.7	...a
23	1.8	2.6	3.0	3.5	...	...	...	3.8	...	3.5	...	2.8	2.0
24	1.8	2.5	3.2	3.5	...	...	...	...	3.8	3.6	...	2.6	1.8
25	...f	...f	3.0	...	3.8	...	...	...	...	...	3.3	2.6	2.0
26	1.7	2.5	3.0	3.5	...	...	4.1	...	3.8	3.8	3.3	2.7	1.9
27	1.8	2.5	3.0	3.6	...	...	...	...	...	3.6	3.1	2.7	1.9
28	1.9	2.6	3.3	p3.6c	3.8	...	...	...b	...	3.7	3.4	2.7	1.9
29	...c	...c	...c	...	...	...c	...	...b	...b	...b	...b	...b	2.2
30	1.9	2.8	...	3.8	...	...	...	4.3	...b	...b	...b	...b	2.2
31	...c	...c	...c	...	...	...	...	...	...	...	p3.7c	...c	...c
MEDIAN*	1.9	2.6	3.1	3.5	3.7	3.7	3.8	3.8	3.7	3.5	3.3	2.7	1.9

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1946 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — FEBRUARY 1946

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.8	8.4	9.1	9.4	q10.1c	10.9	11.1	9.9	11.4	11.0	p10.3c	10.7	q10.0c	q9.3c	8.6	...
4	8.6	p7.0c	q5.2c	p3.4c	p2.7c	p2.5c	5.2	8.5	q10.2c	10.0	q10.2c	10.3	10.0	10.6	11.2	q8.2c	11.4	8.0	11.0	10.6	10.8h	...f	...f	...f	...
5	...f	...f	...f	...f	...f	...f	6.9f	9.5	11.0	11.7	11.2	9.7	9.3	9.5	9.7	10.2	10.8	11.1	11.6	11.8	q11.1c	q10.3c	p9.6f	...f	...
6	8.3f	6.6	5.1	4.7	4.4	3.9	6.2	8.7	q10.0c	11.7	12.4	12.0b	...b	...b	...b	12.4b	13.0	13.4	13.0	p13.0c	...f	...f	...f	...f	...
7	...f	...f	...f	8.2	5.7	2.8	5.1	7.6	9.7	11.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.3	...f	...f	...f	...
8	...f	...f	...f	...f	...f	...f	6.5f	9.2	11.8	q12.2c	12.6	11.6	8.8	9.3	9.3	9.6	9.9	10.3	10.7	11.1	9.3	9.5	...f	...f	...
9	...f	...f	...f	5.8f	3.9	2.4	5.7	9.0	11.6	11.9h	12.6h	13.0h	11.2h	11.2	11.9	12.2	12.0	12.6	12.6	11.9	...c	...c	...c	...c	...
10	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
11	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	13.0	13.2	12.0	12.8	12.6	12.5	12.0	11.9	9.8	9.0	...f	...f	...f	...
12	...f	...f	...f	...f	...f	...f	5.3	8.7	10.6	11.6	q12.5c	q12.7c	q13.0c	13.2	14.0	q14.0c	14.0	14.0	13.2h	12.6h	9.2h	9.6h	9.7h	p10.0f	...
13	p9.3f	...f	...f	p8.7f	8.4f	7.5	6.8	9.3	10.5	q10.2c	q9.8c	q10.4c	11.0	11.6	q12.3c	12.9	q13.2c	13.4	12.6	12.3c	...f	...f	...f	...f	...
14	...f	...f	7.6	3.6	p1.3b	1.7b	4.7	7.8	9.8	11.2	11.3	q11.0c	10.7	...b	...b	12.1	12.6	13.3	13.4	q12.6c	11.9	...f	...f	...f	...
15	...f	...f	...f	...f	...f	...f	6.2	...c	...c	...c	...c	...c	9.5	10.7	11.9	q13.0c	q14.0c	13.4	13.2	12.8	11.4	...f	...f	...f	...
16	...f	...f	...f	5.6f	3.9	2.9	5.2	8.5	10.5	11.0	9.2	9.4	10.0	10.9	11.8	12.6	13.0	13.0	12.9	12.0h	10.5	...f	...f	...f	...
17	...f	6.7	4.6	4.0	3.7	3.0	4.9	8.3	10.0	9.8h	8.8	8.5	8.8	9.7	11.2	11.9	12.3	11.8	11.7	11.3	10.1	...f	...f	...f	...
18	...f	...f	5.9f	4.5	3.5	2.6	4.8	7.9	9.6	9.0h	7.8	7.8	8.3	9.0	10.1	11.5	11.6	11.7	11.6	11.0	...f	...f	...f	...f	...
19	...f	...f	...f	...f	...f	...f	5.5f	8.3	9.5	q10.0c	10.8	10.5h	9.9	10.2	10.7	11.2	11.8	11.9	12.7	12.0	11.1	11.0	11.6	11.0	...
20	9.6	7.1	4.9	4.3	4.0	3.1	5.2	8.0	9.8	11.0	11.3	11.5	10.5	9.9	q10.5c	11.4	12.8	12.6	12.8	13.0	12.7	11.9	11.2	11.2	9.6
21	10.7	9.9	9.3	8.9	8.9	8.1	5.8	9.3	10.6	11.6	11.0	11.2h	11.3	11.4	11.6	12.0	12.4	11.9	11.5	11.4	10.4	9.8	9.4	9.3	10.3
22	...f	...f	...f	...f	...f	...f	6.8	9.5	10.7	10.7h	9.6	9.3	8.8	9.3	q9.7c	10.1	10.8	11.2	11.8	11.8	10.8	10.9	11.4	11.0	...
23	10.3	8.4	6.2	4.7	3.3	2.9	4.9	8.4	9.8	10.4h	9.7	8.8	q8.9c	9.2	9.6	9.8	10.6	11.0	11.1	11.3	10.7	p9.7f	...f	...f	...
24	10.3	9.3	6.5	5.1	4.6	4.0	5.1	8.1	10.1	11.5	11.8	9.9	9.8	9.8	9.8	9.9	10.4	11.0	11.3	11.1	...f	...f	...f	...f	...
25	...f	7.7f	7.3f	6.4	6.1	5.5	6.4	9.1	10.3	11.0	11.1	11.8	12.0	12.4	12.4	12.2	12.7	12.6	12.4	11.7	...f	...f	...f	...f	...
26	...f	...f	...f	6.1	5.3	4.8	5.2	8.4	10.3	11.4	12.2	12.6	12.8	11.9	11.8	11.8	11.9	11.7	11.2	9.6	...f	...f	...f	...f	...
27	...f	...f	...f	...f	5.4	5.0	6.1	8.7	10.2	11.5	11.8	12.6	12.7	12.2h	11.9	12.0	11.8	11.4	10.1	9.1	p7.7f	...f	...f	...f	...
28	p7.7f	6.3	5.4	4.7	4.5	4.3	5.5	8.8	10.2	11.5	q11.8c	12.0	11.9	11.9	12.0	12.0	12.3	11.9	11.5	9.2	...f	...f	...f	...f	...
29																									
30																									
31																									
MEDIAN*	9.4	7.1	5.9	4.9	4.4	3.1	5.5	8.6	10.2	11.2	11.2	11.0	10.0	10.6	11.4	12.0	12.2	11.9	11.8	11.6	10.7	10.0	9.7	10.5	9.4

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 392

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1946

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	310	p320c	340	350	p340c	340	...c	...c	...c	260	280	300	330	310	260	...
4	240	...c	...c	...c	...c	...c	270	260	310	320	p360c	400	340	310	300	p220c	230	280	300	320	370	410	450	440	...
5	420	400	390	330	270	240	270	240	220	290	310	340	340	340	320	190	220	230	290	310	p330c	p330c	320	280	301
6	230	230	250	240	250	250	270	240	220	290	310	320b	...b	...b	...b	...b	270b	250b	290	320	430	330	300	380	...
7	330	280	240	220	220	210	230	250	230	...b	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	520	640	560	500	...
8	450	460	410	350	320	300	300	270	230	p230c	230	300	230	310	...b	290	220	240	280	310	390	310	240	350	...
9	310	260	230	230	230	240	260	250	230	240	310	300	300	290	220	300	...b	250	280	330	...c	...c	...c	...c	...
10	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
11	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	310	310	...b	300	210	230	260	280	340	390	400	410	400	...
12	310	320	230	220	240	240	270	250	...b	...b	340	p340c	p340c	350	300	p300c	230	250	290	320	380	340	300	290	...
13	280	250	230	220	220	220	270	250	240	p290c	p320c	p310c	300	290	p300c	300	240	240	270	340	430	340	340	310	283
14	290	250	220	230	300	320	290	270	240	310	310	p310c	300	...b	...b	230	250	250	280	320	430	500	500	430	...
15	400	350	330	280	240	230	280	240	220	...c	...c	...c	300	300	280	p250c	p230c	240	270	320	350	370	380	330	...
16	300	260	230	230	240	240	260	240	230	290	300	310	310	300	300	300	220	230	280	320	320	430	260	240	277
17	230	230	240	240	230	240	250	240	210	210	350	340	380	330	320	320	230	240	270	330	340	370	350	350	285
18	290	230	240	240	240	240	260	240	200	320	360	370	370	350	340	310	200	240	270	350	380	340	360	300	293
19	230	250	250	250	240	240	250	240	240	p320c	340	340	360	350	330	200	210	240	260	310	330	300	250	220	273
20	220	230	260	260	240	240	260	240	220	300	310	320	340	320	p310c	240	220	240	250	300	300	310	320	280	272
21	240	280	270	260	260	220	260	240	220	300	300	280	310	300	310	220	230	240	260	290	320	320	310	310	273
22	300	280	300	260	240	230	270	240	230	310	300	330	330	320	p300c	200	210	240	260	280	300	270	230	240	270
23	220	210	240	220	240	260	260	240	220	310	330	340	p350c	330	320	290	220	240	270	320	350	320	280	250	276
24	240	220	240	240	260	240	260	240	230	300	300	310	340	330	330	300	210	240	270	320	370	350	280	260	278
25	230	230	230	240	240	220	260	230	230	280	320	310	320	320	310	200	210	240	280	340	410	350	300	250	273
26	230	220	230	240	230	220	270	250	230	300	310	320	320	320	210	210	230	240	280	350	400	350	320	310	275
27	240	230	240	250	230	230	260	240	220	280	210	320	320	310	310	220	230	250	270	370	390	430	300	260	275
28	230	230	230	240	250	240	260	240	220	290	300	310	330	340	290	280	220	240	280	380	470	420	320	270	287
29																									
30																									
31																									
* MEDIAN	240	250	240	240	240	240	260	240	230	300	310	320	330	320	310	240	230	240	280	320	380	340	320	300	280

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 393

FEBRUARY 1946

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1946

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
2	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
3	...	...	...c	4.9	5.0	5.2	5.2	p5.2c	5.1	...c	...	...	...
4	...	...	...c	5.2	p5.2c	5.3	5.1	5.0	4.9	...	...	...	...
5	...	...	...c	5.0	5.0	5.3	5.2	5.2	5.0	...	...	...	...
6	...	...	...c	5.2	5.2	...b	...b	...b	...b	...b	...	...	...
7	...	...	...c	...b	...c	...c	...c	...c	...c	...c	...	...	...
8	...	...	...c	...c	...c	5.0	...c	5.1	...b	4.8	...	...	...
9	...	...	...c	...c	5.2	5.2	5.3	5.2	p5.1	4.8	...	...	...
10	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
11	...	...	...	...c	...c	5.2	5.2	...b	5.0	...c	...	...	...
12	...	...	...c	...b	...c	...c	...c	...c	5.1	...c	...	...	...
13	...	...	...	...c	p5.0c	p5.1c	5.2	5.1	p5.1c	5.1	...	...	...
14	...	...	...c	5.2	5.2	p5.1	5.1	...b	...b	...	...	...	...
15	...	...	...	...c	...c	...c	5.1	5.2	4.9	...c	...	...	...
16	...	...	...	5.1	5.1	5.2	5.1	5.1	5.0	4.8	...	...	...
17	...	...	...	...	5.0	5.1	5.3	5.1	5.1	4.8	...	...	...
18	...	...	...	4.9	5.1	5.1	5.1	5.0	5.0	4.8	...	...	...
19	...	...	...	p5.0c	5.2	5.1	5.1	5.1	p4.9c	...	...	...	...
20	...	...	...	5.1	5.0	5.0	5.1	5.1	p4.9c	...	...	...	...
21	...	...	...	5.0	5.0	4.9	5.0	5.0	5.1	...	...	...	...
22	...	...	...	5.1	5.0	5.1	5.1	5.0	...c	...	...	...	...
23	...	...	...	5.1	5.0	5.1	p5.1c	5.1	5.0	4.7	...	...	...
24	...	...	...	5.0	5.1	5.2	5.2	5.1	5.1	4.8	...	...	...
25	...	...	...	5.0	...	5.2	5.2	5.2	5.0	...	...	...	...
26	...	...	...	5.1	5.2	5.3	5.3	5.2	...	...	...	...	...
27	...	...	...	5.2	p5.2c	5.2	5.3	5.2	5.1	...	...	...	...
28	...	...	...	5.2	p5.2c	5.3	5.4	...b	5.0	4.8	...	...	...
29													
30													
31													
MEDIAN*	...	...	...	5.1	5.1	5.2	5.2	5.1	5.0	4.8	...	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
2	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
3	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
4	...	...	...c	210	p210c	210	210	200	210	...	...	...	...
5	...	...	...c	210	220	220	210	200	210	...	...	...	...
6	...	...	...c	230	210	...b	...b	...b	...b	...b	...	...	...
7	...	...	...c	...b	...c	...c	...c	...c	...c	...c	...	...	...
8	...	...	...	...c	...c	200	p200c	210	...b	210	...	...	...
9	...	...	...c	...c	220	230	200	p200c	p200c	...	...	...	...
10	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...	...
11	...	...	...	...c	...c	210	210	...b	210	...c	...	...	...
12	...	...	...	...b	...c	...c	...c	...c	230	...c	...	...	...
13	...	...	...c	...c	...b	...c	220b	220	p230c	240	...	...	...
14	...	...	...	230	210	p200	200	...b	...b	...	...	...	...
15	...	...	...	...c	...c	...c	200	210	210	...c	...	...	...
16	...	...	...	220	200	200	200	200	200	210	...	...	...
17	...	...	...	...	210	200	200	200	210	200	...	...	...
18	...	...	...	210	210	200	200	200	200	200	...	...	...
19	...	...	...	p210c	210	200	200	200	210	...	...	...	...
20	...	...	...	220	210	210	200	200	p210c	...	...	...	...
21	...	...	...	210	210	200	200	200	220	...	...	...	...
22	...	...	...	220	210	210	190	210	...c	...	...	...	...
23	...	...	...	220	210	200	p200c	200	200	200	...	...	...
24	...	...	...	210	210	210	210	200	200	200	...	...	...
25	...	...	...	220	210	210	210	200	210	...	...	...	...
26	...	...	...	230	220	210	200	210	...	...	...	...	...
27	...	...	...	220	p210c	210	210	210	210	...	...	...	...
28	...	...	...	220	p210c	210	210	...b	220	210	...	...	...
29													
30													
31													
MEDIAN*	...	...	...	220	210	210	200	200	210	210	...	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 394

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FEBRUARY 1946

FEBRUARY 1946

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
4	...c	...c	...c	...c	...c	2.3	p2.3c	2.3	2.1	p2.0c	1.9	p1.2c	1.2
5	0.9	1.4	1.8	1.9	...c	p4.1c	3.8	2.4	3.6	2.2	1.7	1.2	1.0
6	0.9	1.2	1.8	2.3	4.0	...b	...b	...b	...b	...b	...b	...b	1.2
7	1.2	1.9	...b	...b	...c	...c	...c	...c	...c	...c	...c	...c	...c
8	0.8	1.3	1.7	p2.0c	2.2	2.1	2.1	2.3	...b	2.1	1.9	1.8	1.2
9	0.9	1.8	1.7	p2.0c	2.0	2.3	4.0	2.0	2.3	2.2	...b	p2.7c	p1.1c
10	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
11	...c	...c	...c	...c	...c	2.2	2.3	...b	3.8	2.0	1.7	1.2	1.1
12	0.9	1.8	...b	1.8	...c	...c	...b	...b	...b	...b	2.4	1.2	1.2
13	1.2	2.5b	1.2	p1.8c	p4.7b	p1.8c	2.1b	...b	...c	1.3	1.3	1.2	1.2
14	1.2	2.0	1.3	1.2	1.3	p1.8c	1.3	...b	...b	1.4	1.3	1.2	1.3
15	...c	1.3	1.4	...c	...c	...c	1.9	1.9	1.9	p1.7c	p1.2c	1.2	1.2
16	1.2	1.2	1.3	1.2	1.7	1.8	1.8	1.9	1.8	1.7	1.2	1.2	1.3
17	1.7	1.3	1.2	1.2	2.2	1.7	1.8	2.0	2.3	1.9	1.2	1.2	1.1
18	1.3	1.2	1.3	1.7	1.7	1.8	1.7	1.8	1.7	1.8	1.5	1.0	1.3
19	1.4	1.6	1.6	p1.7c	1.7	1.8	1.7	1.7	1.8	1.7	1.7	1.7	1.6
20	1.3	1.6	1.5	1.7	1.7	1.8	1.7	1.8	p1.8c	1.8	1.6	1.7	1.5
21	1.3	1.2	1.1	1.3	1.7	1.7	1.8	1.8	1.7	1.7	1.7	1.6	1.3
22	1.3	1.4	1.5	1.7	1.7	1.8	1.8	1.8	p1.7c	1.7	1.7	1.7	1.3
23	1.3	1.3	1.5	1.7	1.7	1.9	p1.9c	2.0	2.0	1.8	1.5	1.6	1.5
24	1.2	1.0	1.6	1.7	1.7	1.8	1.8	1.7	1.8	1.7	1.7	1.5	1.5
25	p1.1c	1.1	1.8	1.8	1.8	1.7	1.9	1.9	2.0	1.9	1.8	1.7	1.3
26	1.3	1.3	1.7	1.8	2.5	2.3	2.0	2.3	2.0	1.8	1.7	1.5	1.3
27	1.3	1.2	1.3	1.7	2.0	2.0	2.3	2.5	2.3	1.9	1.7	1.7	1.4
28	1.4	1.6	1.8	1.7	1.7	1.8	2.0	...b	4.5b	2.0	1.7	1.6	1.3
29													
30													
31													
MEDIAN*	1.2	1.3	1.5	1.7	1.7	1.8	1.9	1.9	2.0	1.8	1.7	1.5	1.3

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	2.4	p2.3c	2.2
4	1.9	...c	...c	3.7	...c	...	...	...	...	1.8	...	...c	1.8
5	1.7	2.8	3.4	3.8	...	...	...	...	4.1	...	...	2.8	2.0
6	1.9	2.8	3.3	...	...	...b	...b	...b	...b	...b	...b	...b	2.3
7	2.0	...b	...b	...b	...c	...c	...c	...c	...c	...c	...c	...c	...c
8	1.9	2.7	3.5	...c	...	4.2	4.2	...	...b	...	...	3.0	2.1
9	1.8	2.9	3.4	p3.8c	...	...	...	...	...	...	...b	2.9	2.0
10	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
11	...c	...c	...c	...c	...c	...	...	...b	...	4.0	3.5	p3.0c	2.0
12	1.9	2.9	...b	...b	...c	...c	...b	...b	...b	...b	4.4	3.0	2.2
13	1.8	...b	3.5	...c	...b	...c	4.0b	...b	...c	...	...	2.7	1.9
14	1.7	2.6	...	...	...	...c	...	...b	...b	...	...b	3.0	2.0
15	1.8	2.5	...c	...c	...c	...c	...	...	...	...c	...	2.7	1.9
16	1.7	2.6	3.2	3.6	3.9	4.1	4.0	...	...	...	3.4	2.7	1.9
17	1.7	2.6	3.0	3.8	...	...	...	4.0	4.0	3.7	...	2.6	1.8
18	1.7	2.5	3.1	3.5	3.8	4.0	. .	4.0	4.0	3.7	3.3	2.6	1.8
19	1.6	2.6	3.3	p3.5c	...	...	...	...	...	...c	3.1	2.6	1.8
20	1.6	2.5	3.0	3.5	3.7	4.2	...	4.0	...	3.6	3.4	2.7	1.7
21	1.6	2.4	3.0	3.5	3.7	4.0	...	...	4.0	...	3.2	2.6	1.8
22	1.6	2.5	3.4	3.6	4.0	...	...	4.0	...	3.7	3.2	2.6	1.7
23	1.6	2.6	3.3	3.6	...	...	...	...	3.8	...	3.2	2.6	1.8
24	1.6	2.6	3.2	3.6	...	...	...	...	...	3.8	3.4	2.7	1.8
25	1.7	2.6	3.4	3.6	4.0	...	...	...	...	3.6	3.4	2.7	1.8
26	1.7	2.7	3.3	3.8	4.1	...	4.2	...	...	...	...	2.7	1.9
27	1.7	2.7	3.3	3.7	4.2	...	...	...	...	...	3.4	2.8	1.9
28	1.7	2.7	3.4	3.8	4.0	4.1	...	...b	...b	4.0	...	2.8	1.8
29													
30													
31													
MEDIAN*	1.7	2.6	3.3	3.6	4.0	4.1	4.1	4.0	4.0	3.7	3.4	2.7	1.9

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 395

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1946 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MARCH 1946

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	...f	...f	...f	...f	8.1	...f	p5.1f	...f	10.2f	11.6	11.9h	11.4	11.9	12.5	13.0	13.2	12.9	12.7	12.4	8.8j	...f	...f	...f	p8.3f	...
2	...f	...f	...f	8.0f	...f	...f	...f	9.3f	11.5	12.6	12.8	12.7	12.6	13.2	13.1	13.4	13.5	12.9	12.6h	11.2h	...f	...f	...f	...f	...
3	...f	...f	p7.4f	6.1f	...f	...f	5.5f	9.3	10.7	11.3	10.4	10.5	10.4	10.9	11.7	11.9	12.6	13.0	12.6h	10.0h	...f	...f	...f	...f	...
4	...f	6.8f	5.9	...f	...f	...f	6.9	9.9	11.4f	12.2	9.9	9.3	9.5	10.0	10.2	10.4	10.5	10.3	9.7	9.0	p8.9f	8.8	9.1	8.7	...
5	7.7	6.1	5.4	5.2	4.5	4.1	5.8	10.8	12.4	13.0	13.2	13.2h	11.8h	11.4	10.7	q10.2c	10.3	10.5	10.7	10.1	9.3	9.6	9.7	9.7	9.4
6	8.7	8.3	7.4	7.2	7.2	7.4	8.7	10.6	12.0	12.7	12.8h	10.8	10.5	10.1	10.0	10.1	10.8	11.3	11.3	p9.8c	...f	...f	...f	...f	...
7	8.3	7.2f	...f	5.6	5.3	5.3	7.0	10.3	11.9	12.8	12.0h	10.8	9.7	9.8	9.8	10.1	11.1	11.6	11.9	10.8	...f	...f	...f	...f	...
8	9.1	7.6f	6.6	5.4	4.7	3.9	6.0	9.4	10.9	12.3	13.0	13.2h	11.2h	...b	q10.7c	10.1	10.4	10.8	11.3	10.2	...f	9.5f	10.0	9.6	...
9	9.2	8.1f	7.1	6.4	6.2	6.3	7.6	11.3	11.8	13.0	13.0h	11.9h	10.6	11.1	11.7	11.9	11.4	10.5	10.4	9.8	9.8	10.2	9.4	9.1	9.9
10	9.5	11.1	9.3	9.2	8.2	7.3	8.0	10.7	12.0	13.0	14.2	14.4	15.2	15.7	14.1	12.2h	9.5	10.1	11.2	10.8j	10.1	10.3	10.8	10.7	11.2
11	9.4	7.4	7.3	8.0	8.0	7.7	8.4	10.8	13.0	14.4	q14.4c	14.4	13.6	11.8	11.1	10.3	10.2	10.2	9.5	8.8	8.9	9.4	9.3	9.2	10.2
12	8.7	8.4	7.6	6.4	5.8	4.8	5.1	8.8	11.4	11.9	11.7	11.2	11.4	12.2	12.9	12.6	13.0	12.6	11.9	q10.0c	...f	...f	...f	...f	...
13	9.1f	...f	p10.4f	p8.4f	...f	...f	p4.9f	7.6	11.2	12.4	12.2	11.3	11.6	11.7	11.9	12.5	12.6	12.2	11.2	8.3	...f	...f	...f	...f	...
14	8.0f	...f	7.0	5.4	4.3	3.2	4.9	8.8	10.7	q11.0c	10.1	10.2	10.7	11.5	11.9	12.5	q12.6c	12.4	11.5	9.1	7.6f	...f	p9.7f	...f	...
15	...f	9.0f	7.4	...f	...f	1.8b	4.8	8.3	10.1	11.0	10.5	10.0	10.2	10.8	10.9	11.9	11.4	11.2	9.6	8.1	7.2	7.2	8.1	...f	...
16	...f	...f	...f	...f	3.6f	2.9	4.8	8.4	10.2	11.2	11.5	11.1	11.3	11.6	12.1	12.4	12.8	12.6	12.7	11.4	...f	...f	...f	...f	...
17	...f	...f	...f	...f	5.2	4.7	5.2	8.2	10.3	11.8	12.0	11.1	10.2	11.1	12.2	12.8	13.2	13.1	q12.1c	11.1a	...f	...f	...f	...f	...
18	p10.8f	9.0	...f	...f	...f	...f	p4.8f	8.3	10.3	10.2	9.6	9.5	10.1	10.7	11.8	q12.3c	12.9c	12.9	12.5c	q11.2h	...f	...f	10.4f	...f	...
19	...f	...f	...f	3.8f	2.3	1.5j	4.7	8.6	10.5	11.8	11.9	11.1	11.0	11.7	13.8	13.6	14.0	13.4	13.0	11.7	...f	...f	p11.4f	...f	...
20	11.6f	p8.3f	5.9f	p4.9f	...f	3.7	5.2	6.6	10.9	11.9	11.8	10.7	10.0	10.0	10.0	10.4	10.9	11.0	11.1	9.1	...f	9.9f	...f	9.3f	...
21	...f	...c	...c	...c	...c	...c	...c	...c	...c	11.9	12.7	11.9	11.3	11.2	11.3	11.6	11.6	11.5	11.4	p10.4c	...f	...f	...f	...f	...
22	...f	...f	...f	...f	...f	...f	4.8	8.5	10.7	12.1	12.6	11.4	10.4	10.7	11.3	11.9	q12.9c	12.9	12.8c	11.0	...f	...f	...f	...f	...
23	...f	...f	...f	...f	...f	p4.2f	5.8f	9.4	11.8	13.0	12.9h	10.7	10.3	10.3	10.7	10.5	10.6	10.9	10.4	9.1	...f	...f	...f	...f	...
24	8.1	9.9	...f	...f	...f	...f	p5.7c	p11.9f	...f	12.4	13.0	13.3	14.2	13.8	13.2	10.8	10.9	11.4	12.4	11.9	11.4	...f	11.5f	11.5	...
25	...f	...f	...f	...f	...f	8.9f	10.2	p12.2f	p12.8f	14.0	14.1h	13.0	13.3	13.6	12.9	13.4	13.6	13.8	14.0	14.7c	14.4	13.0	12.0	11.0	...
26	8.4	7.4	7.0	6.3	...f	...f	4.5f	8.8	10.8	11.5	q12.2c	13.0	12.8	12.4	11.7	10.5	q9.5c	9.6	10.0	9.1	7.6f	7.3	7.8	8.4	...
27	8.7	7.8f	6.6	6.0	5.9	6.3	7.9	11.3	13.4	14.3	p14.4c	p14.4c	q14.3c	14.2	12.6	11.3	10.6	10.2	10.1	10.1c	10.7	10.3	9.0	9.0	10.4
28	9.7	9.9	8.4	8.2	3.8	...b	5.6	9.3	9.7	8.6	...c	...c	...c	...c	...c	...c	...c	...c	...c	10.0	9.8	9.7	10.1	10.5	...
29	8.8	7.2	...f	...f	...f	...f	...f	p10.8c	13.4	14.2	14.3	14.3	11.9	12.5	12.8	q13.3c	13.8	13.3	q12.3c	10.5	9.9	...f	...f	...f	...
30	...f	...f	...f	...f	p4.8f	4.0	5.4	9.1	10.7	10.2	10.0	10.2	10.7	11.3	11.8	11.8	11.8	11.8	11.8	9.5	...f	...f	...f	...f	...
31	p10.0f	...f	...f	...f	...f	...f	5.0f	9.0	10.4	10.3	9.8	9.9	10.1	10.2	10.5	11.0	11.6	11.3	11.0	8.9	9.0	10.6	10.3	8.6	...
MEDIAN*	9.0	8.1	7.2	6.3	5.2	4.4	5.4	9.3	10.9	12.0	12.2	11.2	11.0	11.4	11.8	11.9	11.6	11.6	11.4	10.1	9.6	9.7	9.8	9.2	9.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 396

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1946 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS MARCH 1946

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	250	250	240	260	260	340	290	260	230	220	280	300	310	...b	...b	240b	240	270	290	380	340	350	250	240	...
2	230	250	240	270	300	320	280	240	220	270	280	280	300	290	270	300	220	260	290	380	360	330	340	300	284
3	240	240	230	250	250	230	270	250	240	280	290	310	320	310	280	210	280	270	300	430	400	320	280	240	280
4	250	250	240	250	250	270	270	260	230	290	300	300	320	200	280	230	230	260	290	360	360	270	230	220	267
5	220	240	270	270	280	300	270	260	230	280	270	280	280	280	220	p230c	240	250	270	380	340	280	250	230	268
6	220	250	250	260	270	270	270	250	280	290	300	280	300	310	270	270	250	260	290	360	410	280	240	220	277
7	230	230	250	280	250	240	270	270	230	230	280	310	310	320	280	280	230	250	290	410	410	330	250	220	277
8	220	230	240	240	250	240	270	230	230	220	300	340	320	...b	p240c	220	210	260	280	370	360	260	250	220	...
9	230	240	240	240	250	270	280	250	240	300	290	310	320	320	200	220	220	270	280	320	290	240	230	250	262
10	240	250	250	250	230	280	290	250	240	270	230	290	290	290	280	280	230	250	290	340	360	270	250	220	268
11	230	270	260	300	320	270	300	260	250	290	220	280	280	280	290	280	220	250	300	360	340	250	230	230	273
12	240	220	220	240	240	240	290	250	230	220	300	300	300	280	260	270	220	260	290	350	350	330	220	250	265
13	230	230	230	230	240	240	260	250	240	290	310	290	300	300	280	280	230	260	290	410	420	360	290	250	280
14	200	230	230	230	240	240	270	250	230	p220c	300	310	290	310	260	200	p240c	250	290	400	410	400	270	290	273
15	220	230	220	210	230	280	270	240	240	240	310	310	310	290	320	220	240	260	300	400	400	350	310	280	278
16	240	220	240	250	250	250	270	240	230	310	300	320	310	310	280	280	220	250	280	410	360	320	240	270	277
17	260	230	240	240	250	250	260	240	230	290	300	310	300	190	210	210	230	240	280	410	370	340	230	260	265
18	230	230	240	230	250	240	270	250	230	290	290	290	300	210	310	p280c	230	260	300	390	390	260	320	250	272
19	230	220	230	230	250	290	260	240	250	290	250	300	270	310	310	210	250	260	280	400	350	340	270	220	271
20	210	210	240	260	250	250	270	240	240	300	290	300	310	310	320	210	220	250	290	430	400	250	240	230	272
21	210	...c	...c	...c	...c	...c	...c	...c	...c	240	230	310	320	310	280	230	220	260	300	410	410	410	270	230	...
22	290	230	230	240	250	340	290	250	240	280	320	290	300	290	210	200	230	260	300	450	410	370	260	230	282
23	220	230	240	250	260	250	260	260	230	300	300	290	290	280	210	230	240	270	300	410	340	410	360	320	281
24	300	260	280	300	300	230	250	240	240	280	280	...b	290	270	230	230	240	260	230	320	350	400	330	330	...
25	420	480	480	410	300	250	280	260	240	280	280	230	300	220	270	230	350	240	250	230	230	240	210	220	288
26	240	260	280	320	340	330	300	250	240	270	p280c	290	290	280	270	260	p260	260	280	370	400	300	260	230	286
27	230	220	240	280	290	270	250	240	230	270	270	220	280	280	280	270	230	250	270	300	270	250	260	230	258
28	230	230	240	230	220	520	300	260	260	290	...c	...c	...c	...c	...c	...c	...c	...c	...c	250	240	230	250	300	...
29	390	430	430	400	380	350	360	240	230	260	280	270	280	270	250	p240c	230	p280c	p360c	360	350	330	250	230	310
30	250	230	230	230	240	230	270	250	230	280	290	300	290	280	280	270	220	370	280	350	370	320	270	240	274
31	230	230	230	230	230	250	280	250	230	300	290	280	270	290	280	220	260	260	300	410	360	240	220	210	265
* MEDIAN	230	230	240	250	250	260	270	250	230	280	290	300	300	290	280	230	230	260	290	380	360	320	250	230	271

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 397

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	5.2	5.4	5.3	...b	...b	...b	...	...	...
2	...	...	...	5.0	5.1	5.3	5.4	5.3	4.9	5.2	...	...	...
3	...	...	...	5.0	5.2	5.4	5.4	5.3	5.0	...	...	...	...
4	...	...	...	5.0	5.1	5.2	5.3	...	5.0	...	...	...	...
5	...	...	...	5.2	5.2	5.2	5.2	5.1	...	...	...	...	...
6	...	...	...	5.3	5.3	5.2	5.3	5.3	5.1	4.7	...	...	...
7	...	...	...	...	5.2	5.3	5.3	5.3	5.0	4.8	...	...	...
8	...	...	...	...	5.2	5.4	5.3	...b	...c	...	...	...	...
9	...	...	...	5.0	5.3	5.3	5.3	5.2	...	...	...	...	...
10	...	...	...	5.2	...	5.2	5.2	5.1	4.8	4.8	...	...	...
11	...	...	...	5.2	p5.2c	5.3	5.3	5.1	5.0	4.9	...	...	...
12	...	...	...	...	5.3	5.3	5.2	5.3	4.8	4.8	...	...	...
13	...	...	...	5.1	...	5.2	5.2	5.3	4.9	4.8	...	...	...
14	...	...	...	...	5.2	5.3	5.2	...	4.8	...	...	...	...
15	...	...	...	...	5.2	5.2	5.2	5.2	4.9	...	...	...	...
16	...	...	...	5.2	5.1	5.3	5.1	5.2	4.9	4.6	...	...	...
17	...	...	...	5.0	5.2	5.2	5.1	...	...	...	...	...	...
18	...	...	...	4.8	4.9	5.0	5.2	...	5.1	...	...	...	...
19	...	...	...	5.1	4.7	p4.8	p5.0	5.2	5.2	...	...	...	...
20	...	...	...	...	5.2	5.2	5.2	5.2	...	...	...	...	...
21	...	...	...	...	...	5.3	5.2	5.2	4.9	...	...	...	...
22	...	...	...	5.3	5.4	5.2	5.3	5.1	...	...	...	...	...
23	...	...	...	5.2	5.4	5.1	5.1	5.2	...	...	...	...	...
24	...	...	...	5.1	5.3	...b	5.2	4.9	...	...	...	...	...
25	...	...	...	5.2	5.2	...	5.0	...	5.1	...	...	...	...
26	...	...	...	5.2	p5.2c	5.2	5.2	5.2	5.0	4.5	p3.9c	...	...
27	...	...	...	5.2	5.2	...	5.3	5.2	5.0	4.7	...	...	...
28	...	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...
29	...	...	...	5.2	5.3	5.2	5.3	5.2	4.7h	...c	...	...	...
30	...	...	...	5.1	5.3	5.3	5.2	5.2	4.9	4.8	...	...	...
31	...	...	...	5.1	5.2	5.1	5.2	5.1	5.2	...	...	...	...
* MEDIAN	...	...	...	5.2	5.2	5.2	5.2	5.2	5.0	4.8	...	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	220	210	220	...b	...b	...b	...	...	...
2	...	...	...	220	210	210	220	210	210	220	...	...	...
3	...	...	...	230	230	220	200	200	210	...	...	...	...
4	...	...	...	220	220	210	210	...	220	...	...	...	...
5	...	...	...	240	220	210	220	220	...	...	...	...	...
6	...	...	...	230	220	210	220	210	200	210	...	...	...
7	...	...	...	...	220	210	210	210	200	200	...	...	...
8	...	...	...	...	220	230	210	...b	...c	...	...	...	...
9	...	...	...	230	210	220	200	210	...	...	...	...	...
10	...	...	...	230	...	230	220	210	210	210	...	...	...
11	...	...	...	240	p230c	230	210	210	210	210	...	...	...
12	...	...	...	...	230	220	210	210	210	200	...	...	...
13	...	...	...	220	210	220	210	210	200	220	...	...	...
14	...	...	...	...	220	210	210	210	210	...	...	...	...
15	...	...	...	...	220	220	210	210	240	...	...	...	...
16	...	...	...	230	200	220	210	210	200	210	...	...	...
17	...	...	...	220	210	210	210	...	...	...	...	...	...
18	...	...	...	200	200	210	210	...	210	...	...	...	...
19	...	...	...	210	210	200	190	200	210	...	...	...	...
20	...	...	...	230	230	210	210	210	210	...	...	...	...
21	...	...	...	...	...	230	210	220	220	...	...	...	...
22	...	...	...	220	220	210	200	210	...	...	...	...	...
23	...	...	...	230	210	210	210	220	...	...	...	...	...
24	...	...	...	240	230	...b	220	220	...	...	...	...	...
25	...	...	...	230	220	...	220	...	210	...	...	...	...
26	...	...	...	230	p220c	220	210	220	210	210	p220c	...	...
27	...	...	...	230	220	...	220	210	220	210	...	...	...
28	...	...	...	...c	...c	...c	...c	...c	...c	...c	...c	...	...
29	...	...	...	310	210	210	200	200	190	...c	...	...	...
30	...	...	...	220	210	210	210	200	200	210	...	...	...
31	...	...	...	220	210	210	210	210	200	...	...	...	...
* MEDIAN	...	...	...	230	220	210	210	210	210	210	...	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 398

MARCH 1946

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MARCH 1946

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.3	...c	...c	1.7	1.8	2.1	2.5	...b	...b	4.2b	2.4	1.7	...c
2	...c	...c	1.6	1.7	1.7	1.9	2.4	2.4	2.3b	2.3b	1.8b	1.7	...c
3	...c	...c	2.1	1.8	4.3b	2.5b	2.4	2.4	2.3	2.3	1.8	1.7	...c
4	...c	...c	...c	1.8	1.8	2.0	2.3	2.3	2.0	1.9	1.7	1.7	...c
5	...c	...b	...c	1.7	1.9	2.4	2.3	2.3	2.3	p1.9c	1.7	1.7	...c
6	...c	...c	1.5	1.7	1.8	2.0	2.0	2.3	1.9	2.4	2.1	1.7	...c
7	...c	...c	...c	1.7	1.8	2.0	1.9	1.9	1.8	1.8	1.7	...c	...c
8	...c	...c	1.7	1.7	1.9	2.0	1.9	...b	p1.8c	1.7	1.7	1.8	...c
9	...c	...c	1.7	1.7	1.7	2.0	2.0	2.0	1.9	1.7	1.7	...c	...c
10	...c	...c	...c	...c	1.8	2.1	1.9	2.3	2.0	1.8	1.7	1.6	...c
11	...c	...c	...c	1.7	1.9	2.0	1.9	1.9	2.0	1.7	1.7	...c	...c
12	...c	...c	...c	1.7	1.8	1.9	1.9	2.0	2.0	1.7	1.7	...c	...c
13	...c	...c	...c	1.7	1.9	2.0	2.0	1.8	2.4	2.0	1.9	1.7	...c
14	...c	...c	1.7	1.7	1.8	1.8	4.0	2.3	2.0	1.8	p1.7c	...c	...c
15	...c	...c	1.7	1.8	1.8	1.8	1.9	2.0	p1.9c	1.8	1.7	...c	...c
16	...c	...c	...c	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.6	1.6	...c
17	...c	...c	...c	1.5	1.7	1.7	1.9	1.9	1.9	1.8	...c	...c	...c
18	...c	1.9	...c	1.7	1.8	1.9	1.9	1.9	1.8	p1.8c	1.7	...c	...c
19	...c	...c	...c	1.7	1.7	1.8	1.8	1.8	2.0	1.8	2.0	1.4	...c
20	...c	...c	...c	1.9	2.2	2.4	2.3	2.0	2.3	2.1	1.7	1.6	...c
21	...c	...c	...c	2.0	2.1	2.3	2.0	4.0b	2.3	1.8	1.7	...c	...c
22	...c	...c	1.5	1.7	2.0	2.0	1.5	1.8	1.8	1.7	1.7	...c	...c
23	...c	...c	1.7	1.9	2.0	2.0	2.3	2.3	2.2	2.0	1.7	...c	...c
24	...c	1.7	1.7	1.8	1.9	...b	2.3b	2.1	2.0	1.9	1.8	1.5	...c
25	...c	...c	...c	1.7	1.8	2.0	2.0	1.9	2.0	1.8	1.8	1.7	...c
26	...c	...c	1.7	1.7	p1.8c	2.0	2.0	2.0	1.8	p1.8c	p1.7c	1.7	...c
27	...c	...c	1.8	1.7	1.8	1.9	2.3	2.0	1.9	1.7	1.7	1.6	...c
28	...c	...c	1.7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
29	...c	...c	...c	1.7	2.0	1.8	1.9	1.8	1.8	p1.8c	1.7	...c	...c
30	...c	...c	...c	1.7	1.7	1.8	1.8	1.9	1.8	1.8	1.7	...c	...c
31	...c	...c	...c	1.7	1.9	1.9	1.9	1.8	1.9	1.8	1.7	1.7	...c
* MEDIAN	...c	...c	1.7	1.7	1.8	2.0	2.0	2.0	2.0	1.8	1.7	1.7	...c

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.7	2.7	3.3	3.8	...	...	...	...b	...b	...b	...b	3.0	2.0
2	1.8	2.7	3.5	...	...	...	...	...	...	...b	3.4b	2.9	1.9
3	1.7	2.7	3.5	...	...b	...	...	...	...	4.0	p3.4c	2.8	1.8
4	1.7	2.8	3.4	...	...	...	...	...	...	...	3.4	2.8	1.9
5	1.7	...b	3.5	...	...	...	...	...	...	...	3.4	2.7	1.8
6	1.8	2.7	...	4.0	4.1	4.2	...	...	4.1	...	3.7	2.9	1.8
7	1.7	2.7	3.4	3.7	4.0	...	...	...	4.1	3.9	3.4	2.8	1.9
8	1.7	2.7	...	3.7	4.1	...	4.2	...b	...c	...	...	2.7	1.8
9	1.7	2.7	3.5	3.9	4.1	...	...	...	...	3.8	...	2.7	1.8
10	1.7	2.6	3.4	3.7	4.0	...	4.2	4.2	4.0	3.7	...	2.7	1.7
11	1.8	2.8	3.5	3.9	4.1	...	4.3	4.1	...	...	3.4	2.5	1.8
12	1.6	2.6	3.6	3.7	...	4.1	...	4.2	...	3.7	3.4	2.6	1.7
13	1.6	2.6	...	3.7	...	...	...	4.2	4.2	3.7	...	2.8	1.8
14	1.7	2.7	3.3	...	4.0	...	...	...	...	3.7	p3.1c	2.8	1.6
15	1.7	2.6	...	...	...	4.0	4.0	4.2	...	3.7	...	2.5	1.6
16	1.6	2.5	3.0	...	...	...	...	...	4.0	3.7	3.1	2.6	1.6
17	1.5	2.5	3.1	3.5	3.8	4.0	...	4.0	3.9	3.7	3.2	2.5	1.6
18	1.6	2.6	3.0	3.0	...	...	...	...	...	...c	3.1	2.5	1.6
19	1.6	2.5	3.2	3.6	4.0	...	4.2	...	4.0	3.6	...	2.5	1.6
20	1.6	2.0	...	...	...	...	...	...	...	3.7	3.1	2.5	1.6
21	...c	...c	...c	...	...	...	...	...b	...	...	3.3	2.5	1.6
22	1.6	2.5	3.2	3.6	4.0	...	...	...	...	...	3.0	2.5	1.6
23	1.6	2.6	...	3.7	...	4.1	...	...	...	...	3.4	2.5	1.6
24	1.8	2.6	3.1	3.6	4.0	...b	...b	...	...	...	...	2.6	...
25	1.6	2.6	p2.4c	...	...	...	...	...	3.9	3.7	3.4	2.5	1.5
26	1.6	2.5	3.3	...	...c	...	4.1	4.0	...	3.5	...	2.7	1.6
27	1.6	2.7	3.3	3.7	...	...	4.2	4.0	...	3.5	3.2	2.6	1.6
28	1.7	2.6	3.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
29	1.6	2.6	3.3	3.6	4.0	4.0	...	4.0	...	...c	3.3	p2.6c	1.6
30	1.8	2.5	p3.3c	3.7	4.0	4.1	4.1	4.0	...	3.5	...	3.4	1.6
31	1.6	2.6	3.3	3.6	3.9	...	...	...	...	...	...	2.5	1.6
* MEDIAN	1.7	2.6	3.3	3.7	4.0	4.1	4.2	4.1	4.0	3.7	3.4	2.6	1.6

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 399

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1946 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — APRIL 1946

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.6	6.4	4.7	4.1	3.8	3.8	4.6	8.4	10.2	10.8	10.4	10.0	10.7	10.8	11.3	11.6	11.8f	11.5	10.7	8.5	8.1	8.2	9.0	9.1	8.6
2	9.0	8.2	6.8f	6.5	...f	7.0	7.9	10.4f	11.9	11.8h	11.2	10.7	10.7	11.7	12.2	q12.4c	12.5	12.4	12.0	11.0	11.3	10.8	10.5	9.7	...
3	9.7	8.9	7.1	5.9	4.8	q3.8c	4.5j	8.9	10.8	p11.3c	10.0	10.1	10.2	10.6	11.5	12.4	13.1	13.0	12.4	p10.5c	...f	...f	...f	...f	...
4	9.4	8.3	6.2f	...f	...f	3.6f	5.4f	9.0	11.1	11.3	9.8	9.7	10.0	10.7	10.9	11.3	11.8	11.6	11.5	11.0	11.6	11.8	11.9	10.8	...
5	9.4	8.3	5.9	4.7	4.0	3.0j	5.1	8.7	10.4	10.9	q10.5c	q10.6c	q10.5c	10.7	11.0	11.7	11.6	11.3	9.4	7.9	7.8	8.9	...f	8.0	...
6	...f	7.9	6.8	6.1	5.1	4.5	5.7	9.4	11.6	12.5	12.7	11.5	10.9	10.6	10.5	10.8	11.2	11.1	11.1	10.3	11.3	12.0	12.4f	10.1	...
7	8.6	8.0	7.3	7.0	7.0	6.9	8.4	11.3	13.0	13.7h	12.7h	10.5	10.8	10.2	9.8	9.8	10.2	10.1	10.2	9.5	9.9	9.5	9.6	10.0	9.8
8	9.4	7.9	6.9	6.6	7.3	p5.8f	p6.6f	q10.0c	11.8	12.6	11.9	10.8	10.6	10.5	10.6	10.8	10.4	10.0	9.8	8.5	...f	9.3f	9.4f	9.4	...
9	7.6	6.2	5.5	5.0	...f	...f	5.2f	8.9	11.1	12.3	11.8h	q11.8h	12.1	11.9	11.1	10.7	10.8	10.8	10.3	8.9	8.9	8.5	9.3	9.0	...
10	8.9	7.8	6.6	6.4	6.5	5.9	6.4	9.4	11.6	12.6	12.8	11.9	11.3	11.2	11.5	11.5	11.5	11.2	9.9	8.4	...f	...f	...f	...f	...
11	8.7	...f	...f	6.0	5.2	4.1	5.3	9.0	11.3	11.9	11.3	10.7	11.0	11.5	11.9	12.6	12.6	11.5	10.9	8.2	...f	...f	...f	...f	...
12	8.3	7.2f	6.0f	...f	...f	...f	...f	9.0	10.8	11.5	11.0	10.2	10.8	11.6	11.9	11.6	11.9	11.9	11.8	11.6	p12.1c	11.8	10.9	10.9	...
13	10.6f	9.7	7.2	6.3	6.6f	5.5f	6.1	9.0	10.4	10.2	9.8	9.9	10.7	11.5	11.6	11.7	11.9	11.7	11.4	10.2	11.0	10.8	9.5	8.5	9.7
14	7.8	7.1	5.9	5.6	5.2	3.8	4.8	8.5	10.5	11.8h	11.4h	11.2	11.6	11.6	11.8	12.4	12.8	13.0	12.5	11.6	11.8	11.7	11.7	9.8	9.8
15	10.5	9.3	q7.2c	p6.2c	5.9	...f	p6.7c	q9.0c	9.9	11.3	12.0	12.5	11.9	11.4	10.0	10.2	11.5	11.8	11.2	9.8	p9.0f	9.1	p8.2f	7.9	...
16	...f	...f	...f	6.6f	5.9	4.8	5.7	9.4	11.3	11.8	10.2	9.7	9.5	10.0	10.8	11.3	11.7	11.8	11.4	11.0	10.1f	...f	...f	...f	...
17	7.6f	7.0	5.7f	4.8	4.3	3.3	4.9	8.5	10.3	10.7	9.2	9.0	9.4	10.3	10.9	11.1	11.7	11.8	11.6	10.5	10.6	10.6f	...f	...f	...
18	...f	...f	5.2	4.5f	3.8f	2.4	4.9	8.6	10.7	11.3	10.3h	8.4	8.9	9.2	9.6	10.3	11.1	11.2	10.8	9.7	9.5	9.5	9.6	9.4	...
19	8.8	8.4f	6.6f	6.0	5.8	5.4	6.1	9.2	10.9	11.1	9.7	9.4	9.6	9.8	11.3	q11.3c	11.7	11.7	11.3	9.9	10.6	10.7	10.8	9.5	9.4
20	7.7	6.7	5.9	5.5	5.0	4.2	5.5	8.9	10.8	11.2	10.9	9.3	9.6	10.9	11.8	11.7	11.9	q11.7c	11.0	p10.0c	9.5	9.5f	9.1f	8.2f	9.0
21	7.5	6.4	5.3	4.4	3.6	3.0	4.1	8.5	9.8	q10.1c	q10.6c	11.1	10.7	11.0	11.0	11.6	11.9	11.8	11.2	9.9f	9.8	9.9	9.5	9.4	8.8
22	8.3	6.6	4.4	2.5	1.4b	...b	4.8	8.5	10.2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...c	...c	...c	...c	...c	...c	...c	...c	10.0	10.3	12.4	13.4	13.0h	12.6h	11.0	11.4	11.8	12.6	11.9	9.4	9.5	10.0	10.4	...f	...
24	9.1f	...f	8.4f	9.5	8.9	8.2	...f	10.4f	12.6	12.4h	12.6	11.3	9.2	9.1	10.1	10.4	9.9	10.5	10.1	11.0	11.3	11.0	10.6	11.2	...
25	9.3	7.2	7.1	7.6	6.9	5.8	5.9	9.3	10.9	10.4	9.0	9.1	9.3	9.6	10.4	10.5	10.4	10.6	9.7	9.3	9.5	9.4	8.7	9.0	9.0
26	8.0	7.2	6.9	5.5	4.4	4.1	5.2	8.4	10.8	10.5	9.4	9.1	9.0	9.3	10.0	10.2	q11.8c	11.8	10.5	9.9	9.5	9.5	9.8	8.4f	8.7
27	7.4	5.3	4.0	3.6	3.1	2.6	4.8	8.3	10.0	q10.0c	10.1	9.7	9.9	9.9	10.0	11.2	10.8	10.8	9.8	8.4	8.8	...f	...f	7.7	...
28	...f	7.5	6.8	5.8	4.1	...f	4.7	8.1	10.2	11.0	10.8	9.4	9.0	9.6	9.7	10.1	10.1	10.7	10.7	9.6	10.0	9.7	9.2	8.9	...
29	8.0	7.4	6.3	3.8	2.5	2.3	4.8	8.4	10.3	11.6	11.3	9.7	8.9	8.9	10.1	q10.4c	q9.9c	q9.4c	q8.8c	q8.2c	q7.6c	q7.1c	7.6	7.3	7.9
30	8.2f	7.0	5.8	4.8f	3.6	2.8	4.6	8.4	10.2	10.6	9.7	8.8	8.4	8.7	9.3	9.7	10.4	10.5	10.3	10.0	9.4	9.1	8.6	8.6	8.2
31																									
MEDIAN*	8.6	7.4	6.3	5.8	5.0	4.1	5.2	8.9	10.8	11.3	10.8	10.1	10.5	10.6	10.9	11.3	11.7	11.5	10.9	9.9	9.8	9.6	9.6	9.4	9.2

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 40C

APRIL 1946

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1946

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	220	230	250	310	330	280	260	230	290	300	300	310	290	280	270	220	260	310	420	360	270	230	220	278
2	220	230	250	280	280	230	360	250	240	290	300	280	280	290	210	210	230	260	290	330	270	230	230	220	257
3	220	220	240	240	230	p230c	300	260	280	290	290	310	270	300	250	200	280	270	320	450	400	300	260	240	277
4	250	230	270	260	280	260	280	250	230	210	210	300	300	300	290	210	260	260	300	390	280	240	220	230	263
5	230	230	240	260	280	310	300	260	280	230	p290c	320	330	300	260	210	270	270	320	440	330	270	270	240	281
6	240	240	250	260	270	280	290	260	250	220	280	300	300	300	200	200	240	260	310	380	310	240	220	220	263
7	240	250	270	280	310	280	260	260	230	220	280	280	270	280	280	210	240	260	300	290	370	320	270	230	271
8	220	230	250	270	270	240	290	240	240	230	270	290	290	290	300	210	240	270	320	420	360	290	240	230	271
9	240	250	270	270	270	260	270	240	240	220	240	p300h	280	280	270	210	240	260	310	200	360	280	230	220	259
10	210	230	250	250	240	240	260	240	240	220	280	280	300	290	290	210	230	260	300	460	250	310	240	220	262
11	220	220	230	230	230	230	270	240	240	230	300	280	300	280	270	200	220	260	300	420	390	240	280	230	263
12	220	230	240	230	230	240	260	240	230	210	280	280	300	280	280	260	230	250	290	330	250	230	230	220	252
13	220	210	250	260	240	240	280	240	230	270	280	290	300	300	300	200	250	260	310	310	240	220	220	220	256
14	220	220	240	240	220	220	260	240	230	280	280	280	300	300	280	210	220	260	290	330	270	230	220	220	252
15	230	250	230	230	260	260	270	250	240	270	270	270	200	200	290	220	250	270	310	400	370	270	250	230	262
16	220	220	240	250	230	230	260	240	240	280	270	280	290	190	240	210	230	260	300	360	330	270	220	200	252
17	220	220	230	250	240	240	260	240	220	280	280	290	300	300	290	210	230	250	300	350	330	300	240	220	262
18	220	220	230	240	230	250	260	240	230	280	290	310	320	320	280	220	220	250	300	350	350	280	230	230	265
19	230	220	230	250	250	240	250	240	230	280	300	320	310	310	300	210	220	260	290	320	250	230	230	220	258
20	230	230	240	240	230	230	250	240	230	220	280	p300c	310	320	290	270	240	260	300	330	290	300	240	220	262
21	220	220	220	220	240	250	250	230	230	p260c	300	300	310	320	280	210	240	260	300	340	280	240	220	230	257
22	220	220	230	260	280	...b	260	250	230	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
23	...c	...c	...c	...c	...c	...c	...c	...c	240	220	280	290	310	290	310	230	250	260	320	410	360	400f	250	260	...
24	250	310	330	310	250	250	250	250	240	270	270	210	300	220	280	280	230	260	290	270	250	240	220	220	260
25	220	240	250	260	250	220	250	240	230	270	270	270	280	290	290	270	220	270	300	350	290	240	230	220	259
26	230	230	220	230	240	240	250	240	220	280	280	280	300	190	220	220	p240c	260	320	360	320	290	220	220	254
27	220	240	250	250	260	270	280	240	220	p270c	280	290	300	290	280	280	230	260	320	360	290	280	220	230	267
28	230	240	230	230	230	250	270	250	220	280	280	300	310	300	300	200	240	250	310	360	290	240	230	230	261
29	230	220	220	230	270	290	280	250	230	290	290	300	310	300	300	p300c	p290c	p280c	p270c	p270c	p260c	p260c	220	240	267
30	220	220	230	230	240	250	280	240	200	280	300	310	320	310	190	220	230	250	310	340	280	290	250	230	259
31																									
MEDIAN*	220	230	240	250	250	250	260	240	230	270	280	290	300	290	280	210	240	260	300	350	290	270	230	220	260

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 401

APRIL 1946 — APRIL 1946

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	5.5	5.3	5.2	5.2	5.1	4.8	4.6	...	...	...
2	...	...	...	5.2	5.3	5.3	4.9	5.2	...	...	...	...	...
3	...	...	...	5.2	5.3	5.3	5.0	5.0	4.6	...	...	...	...
4	...	...	...	...	...	5.2	5.2	5.1	4.8	...	...	...	...
5	...	...	...	...	p5.4c	p5.3c	p5.2e	5.1	4.7	...	...	...	...
6	...	...	...	...	5.3	5.2	5.2	5.0	...	...	...	...	...
7	...	...	...	...	5.2	5.2	5.1	5.2	4.8	...	...	...	...
8	...	...	...	...	5.3	5.4	5.4	5.3	5.1	...	...	...	...
9	...	...	...	...	5.4	p5.5c	5.1	5.0	4.8	...	...	...	...
10	...	...	...	...	5.4	5.2	5.3	5.0	5.1	...	...	...	...
11	...	...	...	...	5.2	5.2	5.1	5.2	4.9	...	...	...	...
12	...	...	...	...	5.2	5.0	5.3	5.1	5.0	4.6	...	...	...
13	...	...	...	5.2	5.0	5.1	5.1	5.1	5.0	...	...	...	...
14	...	...	...	5.2	5.2	5.2	5.1	5.0	5.0	...	...	...	...
15	...	...	...	5.0	5.2	5.2	...	...	5.2	...	...	...	...
16	...	...	...	5.0	5.0	5.0	5.4	...	5.0	...	...	...	...
17	...	...	...	4.8	5.2	5.0	5.1	5.2	5.0	...	...	...	...
18	...	...	...	5.0	5.0	5.1	5.1	5.1	4.7	...	...	...	...
19	...	...	...	5.0	5.1	5.2	5.2	5.0	5.0	...	...	...	...
20	...	...	...	...	5.2	p5.2e	5.4	5.1	4.7	4.5	...	...	...
21	...	...	...	p4.8c	p4.8c	4.9	5.0	5.0	4.8	...	...	...	...
22	...	...	...	...c	...c	...c	...c	...c	...c	...	...	...	...
23	...	...	...	...	5.3	5.1	5.2	5.1	5.2	...	...	...	...
24	...	...	...	5.2	5.0	...	5.2	...	5.0	4.5	...	...	...
25	...	...	...	5.0	5.1	5.2	5.2	5.2	5.2	4.7	...	...	...
26	...	...	...	5.1	5.2	4.9	5.1	...	...	...	...	...	...
27	...	...	...	...e	5.0	5.1	5.2	5.0	4.8	4.7	...	...	...
28	...	...	...	5.2	5.1	5.1	5.3	5.1	5.2	...	...	...	...
29	...	...	...	5.1	5.1	5.2	5.2	5.2	4.8	p4.8e	...	...	...
30	...	...	...	5.2	5.1	5.2	5.2	5.0	...	...	...	...	...
31													
* MEDIAN	...	...	...	5.2	5.2	5.2	5.2	5.1	5.0	4.6	...	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	230	220	210	210	210	200	200	...	...	...
2	...	...	...	220	210	200	200	210	...	...	...	...	...
3	...	...	...	220	200	210	200	200	200	...	...	...	...
4	...	...	...	...	...	200	200	200	210	...	...	...	...
5	...	...	...	...	p210c	210	200	210	200	...	...	...	...
6	...	...	...	...	210	210	200	200	...	...	...	...	...
7	...	...	...	...	210	300	200	200	200	...	...	...	...
8	...	...	...	...	210	220	200	200	190	...	...	...	...
9	...	...	...	...	220	p220	200	200	200	...	...	...	...
10	...	...	...	...	210	200	200	200	200	...	...	...	...
11	...	...	...	...	230	210	200	200	210	...	...	...	...
12	...	...	...	...	200	200	200	190	190	190	...	...	...
13	...	...	...	210	200	210	200	200	200	...	...	...	...
14	...	...	...	220	200	200	200	210	200	...	...	...	...
15	...	...	...	220	210	200	...	...	220	...	...	...	...
16	...	...	...	220	200	200	190	...	200	...	...	...	...
17	...	...	...	220	200	200	200	200	200	...	...	...	...
18	...	...	...	220	200	200	210	200	200	...	...	...	...
19	...	...	...	220	220	200	200	220	220	...	...	...	...
20	...	...	...	...	200	p200	200	200	210	190	...	...	...
21	...	...	...	p210c	p210c	210	210	210	210	...	...	...	...
22	...	...	...	...c	...c	...c	...c	...c	...c	...c	...	...	...
23	...	...	...	...	210	220	210	210	220	...	...	...	...
24	...	...	...	220	200	...	210	...	210	220	...	...	...
25	...	...	...	210	200	190	190	200	190	210	...	...	...
26	...	...	...	210	200	200	200	...	...	...	...	...	...
27	...	...	...	p210c	200	200	200	200	200	210	...	...	...
28	...	...	...	200	200	200	210	200	190	...	...	...	...
29	...	...	...	220	200	200	200	200	200	p200c	...	...	...
30	...	...	...	210	200	200	200	200	...	...	...	...	...
31													
* MEDIAN	...	...	...	220	200	200	200	200	200	200	...	...	...

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   K = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

TABLE 402

APRIL 1946

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

APRIL 1946

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

MINIMUM RECORDED FREQUENCY

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	p1.3c	1.3	1.2	1.2	1.8	1.8	2.0	2.0	2.0	1.8	1.2	1.2	1.0
2	1.3	1.2	1.2	1.2	1.8	1.8	1.9	2.0	1.8	1.8	1.2	1.2	1.1
3	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
4	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
5	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
6	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...	...
7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
8	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...
9	...c	...c	...c	...c	...c	...c	1.9	1.9	1.9	1.2	1.2	1.0	1.3
10	1.3	1.2	1.2	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.6	1.5	1.8
11	1.6	1.6	1.3	2.0	1.8	2.2	2.0	2.0	1.8	1.2	1.6	1.6	...
12	1.0	1.6	1.6	1.8	1.9	1.8	1.9	1.9	1.8	1.9	1.7	1.6	1.6
13	1.6	1.6	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.6	1.6	1.7
14	1.6	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.7	1.7	1.7
15	1.6	1.6	1.7	1.8	1.9	1.9	2.0	1.9	1.8	1.8	1.6	1.6	1.7
16	1.7	1.7	1.7	1.8	1.8	1.9	1.8	1.8	p1.8c	1.7	1.6	1.5	1.7
17	1.7	1.6	1.7	1.8	2.0	2.0	2.0	2.0	2.0	1.8	1.8	1.5	1.8
18	1.6	1.6	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.8	1.7	1.5	1.6
19	1.7	1.5	1.6	1.8	1.9	2.0	2.3	2.0	2.0	1.9	1.8	1.7	1.8
20	1.6	p1.6c	1.8	1.8	1.9	p2.0c	1.9	1.9	1.8	1.9	1.8	1.6	1.6
21	1.6	1.6	1.7	p1.8c	p1.9c	2.4	2.1	2.0	2.0	1.8	1.8	1.6	1.7
22	1.7	1.8	1.7	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
23	p1.6c	p1.8c	1.8	1.8	2.0	1.8	1.9	2.0	1.9	1.7	1.8	1.7	1.8
24	1.6	1.8	1.7	1.8	1.8	1.9	1.9	1.9	1.9	1.7	1.6	1.6	1.7
25	1.6	1.7	1.6	1.7	1.8	1.8	1.8	1.9	1.9	1.7	1.6	1.6	1.7
26	1.8	1.6	1.7	1.7	1.8	2.0	1.8	1.8	1.8	1.8	p1.6c	1.6	1.6
27	1.5	1.6	1.6	1.7	1.8	1.8	1.9	1.9	2.3	1.9	1.8	1.8	...
28	1.6	p1.6c	p1.6c	1.8	1.8	1.8	2.0	1.8	1.8	1.7	1.6	1.6	1.8
29	1.7	1.6	1.6	1.8	1.8	1.8	1.8	2.0	1.8	p1.8c	p1.7c	p1.6c	p1.6c
30	q1.7	1.6	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.7	1.8	1.6	1.5
31													
MEDIAN*	1.6	1.6	1.7	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.6	1.6	1.7

CRITICAL FREQUENCY OF E REGION

DAY	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.6	2.8	2.2	3.6	3.8	...	...	...	...	3.6	2.4	2.5	1.6
2	1.6	2.6	3.8	3.6	4.0	...	...	...	...	3.6	3.0	2.5	1.6
3	p1.6c	p2.6c	p3.5c	3.7	3.9	...	...	...	...	3.4	3.3	2.6	...
4	...c	2.7j	3.2	3.6	3.9	...	...	...	...	3.5	3.6	2.6j	...
5	...c	2.6j	3.3	3.6	p3.9c	...	...	...	...	3.6	3.4	2.6j	...
6	...c	2.5	3.2	3.6	3.9	...	...	...	...	3.5	2.5	...	...
7	...c	2.5j	3.2	3.5	4.0	...	...	...	...	3.6	3.0j	2.7j	...
8	...c	3.2	3.3	3.6	4.0	...	...	...	...	3.6	3.3	2.6j	...
9	...c	2.6j	3.4	3.7	3.9	...	...	...	...	3.5	3.2	2.4	1.2j
10	1.6	2.7	3.3	3.6	3.8	...	...	...	...	3.4	3.0	2.4	1.2
11	1.7	2.6	3.2	...	...	...	...	...	...	...	2.8	2.4	1.2j
12	1.7	2.6	...	...	...	...	...	...	3.8	3.6	3.1	2.4	1.1j
13	1.6	2.6	3.2	...	3.8	...	...	...	...	...	3.0j	2.4	1.2j
14	1.4j	2.6	3.3	...	...	...	...	...	...	...	2.4	2.4	1.0j
15	1.6	2.5	2.9	3.4	...	...	...	...	...	...	2.9	2.2	1.0j
16	1.6	2.5	3.5	3.6	3.7	...	...	...	...	...	2.8	2.3	1.2j
17	1.6	2.5	3.2	3.5	...	...	...	...	...	3.4	2.8	2.3	1.0
18	1.5	2.6	3.3	...	...	...	...	...	...	3.4	2.8	3.4	1.1j
19	1.5	2.5	3.2	...	...	...	...	...	...	...	...	2.3	1.0j
20	1.6	p2.7c	3.2	...	...	...	...	...	...	...	2.9	2.3	1.0j
21	1.2	2.6	2.8	p3.4c	...c	...	...	...	...	3.4	...	2.3	1.0j
22	1.4j	2.5	3.0	...c	...	...	...	...	...	...	2.8	p2.2c	p1.0c
23	p1.5c	p2.4c	3.1	3.4	...	...	...	...	...	...	2.8	2.2	1.1j
24	1.7	2.4	3.0	...	...	...	...	...	...	...	3.0	2.4	1.0j
25	1.5	2.5	3.0	...	...	...	...	...	...	...	...	2.4	1.0j
26	1.6	2.5	3.2	...	...	...	...	...	...	3.5	p2.7c	...a	1.1
27	1.6	2.6	3.2	...c	...	...	...	...	...	...	3.0	2.3	1.0j
28	1.7	p2.6c	3.3	...	...	...	...	...	...	...	3.0	2.2	1.0j
29	1.6	2.6	3.2	3.6	...	...	...	...	...	p3.4	p3.0c	p2.2c	p1.0c
30	1.6	2.6	...	...	...	...	...	...	...	...	2.9	2.3	1.1j
31													
MEDIAN*	1.6	2.6	3.2	3.6	3.9	...	...	...	...	3.5	3.0	2.4	1.1

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 403

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1946 — CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND — MAY 1946

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	8.7	6.7	5.6	5.3	5.2	4.3	5.3	8.3	10.5	10.8	9.8	8.9	9.1	8.9	9.3	10.2	10.8	11.5	11.0	10.8	10.8	10.1	9.2	...f	...
2	7.3	6.4f	q5.7c	p5.0c	q4.4c	p3.9c	q4.8c	p8.7c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.4	q8.0c	...
3	7.6	7.7	7.0	4.5	2.5	2.1	4.2	8.4	10.4	11.0	10.7	9.5	q9.6c	9.3	9.6	9.8	9.9	10.3	10.3	9.6	9.3	8.7	7.8f	...f	...
4	7.2	6.4	6.2	5.2	4.6	3.6	5.2	8.7	10.3	11.1	11.8	11.3h	10.1	9.7	9.4	9.8	10.1	10.0	9.6	9.1	9.0	8.3	7.8	7.0	8.4
5	7.0	7.3	7.2	6.3	5.0	3.7	5.1	q9.3c	10.4	11.3	10.8	9.9	9.5	9.4	9.5	9.5	9.3	8.7	8.5	8.6	9.4a	8.9	9.0	7.6	8.4
6	7.8	7.1	5.2	4.7	...f	...f	...f	8.0	10.1	11.6	11.0	10.0	9.6	9.9	10.0	10.2	10.4	10.3	10.2	9.8	11.3	11.6	9.2	8.6	...
7	8.4	6.5	4.0	...f	...f	...f	4.2	p7.9c	q9.4c	q10.8	q10.4c	11.3h	10.0h	9.5h	9.4h	9.3	9.6	9.5	9.1	8.4	8.2	8.1	8.2	8.4	...
8	7.9	7.0	7.1	6.9	...f	...f	...f	q8.4c	q9.5c	10.0	9.8h	9.7h	9.3	p8.5c	8.3h	8.4	8.7	8.4	7.6	6.8	6.5	6.7	7.1	7.6	...
9	7.5	6.7h	5.7	5.3	4.7	5.0	6.0	8.7	q9.6c	10.6	11.5	12.2	11.9	11.5	10.9h	10.4	10.6	10.2	10.2	10.0	9.6	9.2	8.3	7.9	8.9
10	8.1	6.6	6.0	6.1	6.1	5.3	5.7h	7.6	9.5	10.0	9.6	9.1	8.9	8.7	9.1	q8.9c	8.9	9.0	8.5	7.7	7.9	8.0f	7.7	7.7	7.9
11	7.8f	7.9f	q6.8c	6.4	4.8	...f	4.0	7.2	8.6h	8.9	8.8h	9.2	9.8	10.0	10.6	10.9	10.3	9.8	9.7	8.8	8.7	8.0	7.2	7.2	...
12	6.3	6.0	q6.2	...c	...c	...c	...c	...c	...c	9.7	9.7	9.3	9.4	9.4	9.4	9.7	10.3	9.6	9.3	8.9	8.9	9.6	9.2	8.4	...
13	8.0	p7.3f	p6.6f	5.2	4.4	...f	...f	7.4	8.9	9.3	9.0	8.8	8.5	9.7	8.7	8.9	8.8	8.6	8.7	8.6	8.7	8.3	7.3	7.8	...
14	6.7	5.3	4.8	3.6	2.8	2.3	4.1	7.2	8.7	9.5	9.9	9.6	9.2	9.6	9.8	10.1	9.9	9.3	8.3	7.7	7.3	7.2	7.6	8.4	7.5
15	9.1	8.6	7.0	4.4	3.2	2.3	4.2	7.6	8.8	8.9	8.4	8.4	8.3	8.3	8.1	8.0	8.2	8.3	8.6	8.3	8.4	8.7	8.6	7.2	7.5
16	6.6	6.8	6.6	6.5	5.5	5.0	6.2	8.5	9.8	10.6	11.0	10.5	9.4	8.4	8.3	8.9	9.3	9.6	9.3	9.2	8.8	8.8	8.2	8.2	8.3
17	7.9	6.7	6.8	5.8	4.8	3.7	4.4	7.8	9.5	9.4	9.2	9.0	8.4	8.5	...c	...c	...c	...c	...c	8.9	9.0	9.2	7.9	7.7	...
18	7.8	7.7	6.3	4.3	2.9	1.9	4.2	7.8	9.2	9.6	9.8	p9.2c	9.3	9.6	9.6	9.9	10.0	9.0	q9.0c	8.4	p8.4	...e	...c	...c	...
19	...c	...c	...c	...c	...c	...c	...c	...c	...c	8.5	8.0	8.0	7.9	8.1	8.7	8.4	8.8	8.8	8.4	7.8	8.3	q8.4c	...c	...c	...
20	...c	...c	...c	...c	...c	...c	...c	...c	...c	9.0	9.1	q9.2c	q8.9c	q9.1c	9.3	9.8	9.5	9.8	8.8	8.3	9.6	9.0	8.4	7.7	...
21	6.3	5.4	4.3	4.1	4.2	4.0	4.6	8.2	10.5	11.2	10.9	10.4	9.9	9.6	10.0	9.8	9.3	9.0	9.0	9.7	8.1	8.3	8.4	8.6	8.1
22	9.2	9.2	p10.8f	...f	...f	...f	...f	7.0f	8.8	9.8	9.5	9.0	8.9	8.9	9.3	9.3	8.9	8.9	8.4	6.8	6.1f	...f	p5.7f	p6.0f	...
23	...f	...f	...f	3.5f	...f	3.0	4.5f	7.5	9.2	10.0	9.7	9.3	9.3	9.6	q9.9c	10.2	10.0	9.2	8.4	7.2	6.8	7.6	7.6	7.8	...
24	7.6	7.5	7.0	4.7	4.7	4.3	4.9	8.1	10.3	11.0	10.6	9.3	9.0	9.1	9.0	p9.2c	p8.9c	q9.0c	q8.2c	7.4	6.7f	6.5f	...f	6.6f	...
25	7.3	7.0	6.5	5.3	4.6	3.5	4.4	7.4	9.2	9.8	9.7	9.4	9.1	9.2	9.3	10.0	9.9	9.4	8.4	7.1	7.2	7.8	8.4	8.5	7.8
26	7.8	7.8	7.3	4.8	3.8	2.4	4.0	7.4	9.5	10.2	9.6	9.5	9.8	10.0	10.1	9.9	9.6	9.3	8.6	8.2	8.2	8.4	8.5	7.1	8.0
27	8.2	6.8	5.4	3.2	2.8	3.1	3.6h	7.3	8.9	9.4	9.8	9.8	9.9	10.3	10.3	9.9	9.6	8.9	8.4	7.9	8.2	7.6	7.2	6.6	7.6
28	7.2	7.3	7.6	6.6	5.8	5.5	5.9h	6.8	8.3	9.0	9.0	9.6	9.4	9.6	9.4	9.6	9.6	9.2	9.1	8.3	8.0	8.0	7.6	7.2f	8.1
29	7.1	6.4	5.6	4.3	3.7f	3.5	4.1h	7.0	9.4	10.1	10.0	10.2	10.6	9.5	9.1	9.2	9.4	9.4	9.3	8.9	8.5	8.7	8.4	7.8	7.9
30	7.8	7.3	5.7	5.2	4.3	3.6	4.5	7.3	9.0	9.6	9.9	8.4	8.1	8.4	8.8	8.3	8.6	8.2	8.3	7.9	7.8	8.1	7.7	7.0	7.5
31	7.0	7.0	6.4	5.8	5.4	5.6	5.9	7.7	8.8	9.2	9.4	9.4	9.2	9.3	9.2	9.7	q10.7c	10.5	9.7	9.7	9.3	9.1	8.3	7.3	8.3
MEDIAN*	7.7	7.0	6.4	5.2	4.6	3.6	4.5	7.8	9.4	9.9	9.8	9.4	9.3	9.4	9.4	9.7	9.6	9.3	8.8	8.4	8.4	8.4	8.2	7.7	8.0

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	210	220	230	250	240	240	280	250	230	210	290	300	320	300	300	240	230	260	310	330	320	250	230	220	261
2	230	220	240	230	250	280	280	260	260	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	230	p230c	...
3	230	250	240	230	250	260	300	250	240	220	200	200	240	300	300	200	250	270	320	350	330	300	250	210	258
4	220	240	230	240	230	240	250	240	230	230	290	300	310	320	310	240	240	270	320	310	270	230	230	220	259
5	230	230	240	240	230	240	270	250	240	280	300	280	330	330	300	200	230	270	320	310	300a	250	230	230	264
6	210	230	230	320	300	300	300	250	240	290	300	300	300	310	210	230	240	270	310	290	240	230	240	230	265
7	240	210	320	400	430	520	310	260	240	p260c	p290c	310	350	330h	280h	370	240	260	300	330	300	250	230	230	302
8	230	230	260	360	360	330	300	250	260	210	200h	320h	350	330h	210h	220h	240	270	320	390	380	310	240	230	283
9	220	230	260	260	330	330	270	250	230	220	290	290	300	300	280	220	240	260	290	280	240	230	220	230	261
10	230	240	270	290	310	320	290	250	p240c	300	200	310	320	330	320	340	230	260	320	340	300	260f	250	230	281
11	250	220	280	210	250	430	310	250	220	280	300	300	310	310	220	220	250	270	310	350	310	270	230	220	274
12	220	230	p240c	...c	...c	...c	...c	...c	...c	300	300	310	320	300	300	230	230	260	300	330	320	250	230	220	...
13	230	230	230	240	240	260	280	240	220	220	320	320	350	330	300	310	230	270	300	300	260	230	230	220	265
14	210	220	220	230	250	260	270	240	230	300	310	300	300	330	290	210	230	260	300	300	310	290	250	230	264
15	210	220	210	220	220	240	260	250	220	290	300	260	320	320	320	200	240	240	310	310	260	230	210	220	253
16	220	220	240	260	280	280	260	230	230	280	300	320	250	330	320	200	230	260	300	300	280	260	220	230	262
17	230	220	230	230	230	230	270	240	230	280	340	360	300	360	...c	...c	...c	...c	...c	260	250	220	220	220	...
18	220	220	220	250	230	260	280	230	230	290	300	q310	350	340	200	210	220	260	280	320	290	...c	...c	...c	...
19	...c	...c	...c	...c	...c	...c	...c	...c	...c	300	320	340	320	330	320	200	220	260	290	300	270	p290	...c	...c	...
20	...c	...c	...c	...c	...c	...c	...c	...c	...c	200	300	p330c	p330c	p320c	320	310	220	280	310	290	250	230	220	220	...
21	210	220	240	250	240	250	260	230	220	p220c	200	330	210	200	200	260	280	260	280	300	280	260	230	240	245
22	250	260	250	290	340	310	280	240	240	300	300	280	320	310	230	320	240	270	330	400	350	400	270	250	293
23	240	240	230	240	250	270	280	240	220	220	300	290	320	320	p260c	210	220	270	330	360	330	240	230	230	264
24	230	230	230	250	250	230	260	240	220	280	280	300	300	310	300	220	240	p260c	310	380	380	300	270	240	271
25	230	220	220	230	230	260	290	250	240	220	300	300	320	320	210	220	220	260	330	360	320	250	240	220	261
26	220	230	230	220	220	230	290	280	250	300	310	300	300	270	210	210	230	260	300	300	280	240	230	240	256
27	220	220	220	240	260	270	300	250	230	210	290	280	280	300	200	210	220	270	310	350	330	280	240	230	259
28	220	240	240	240	240	250	300	250	230	300	300	320	300	320	310	210	230	260	300	350	350	290	230	230	271
29	210	220	220	220	250	290	300	250	230	220	300	320	300	300	200	200	230	260	290	290	270	250	220	220	252
30	230	220	220	230	240	250	290	240	230	290	310	320	330	340	300	290	240	260	290	300	290	240	220	230	267
31	220	240	280	260	250	240	290	260	230	290	330	310	320	310	210	290	p240c	260	290	280	260	260	240	230	266
MEDIAN*	220	230	230	240	250	260	280	250	230	280	300	300	320	320	290	220	230	260	310	310	300	250	230	230	264

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 405

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1946

FI REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	5.0	5.2	5.2	5.1	5.0	...	...	...	...
2	...	...	...	...	...	..c	...c	...c	...c	...	...	...	...
3	...	...	...	...	...	...	5.2	5.3	5.1	...	...	...	...
4	...	...	...	...	5.1	5.1	5.4	5.2	5.0	...	...	...	...
5	...	...	...	5.2	5.3	5.0	5.3	5.2	5.0	...	...	...	...
6	...	...	...	5.0	5.1	5.1	5.1	5.2	...	...	...	...	...
7	...	...	...	p5.0c	p5.1c	5.2	5.4	5.5	4.4	5.1	...	...	...
8	...	...	...	...	...	5.2	5.2	5.0	...	...	...	...	...
9	...	...	...	...	4.9	5.0	5.1	4.8	4.5	...	...	...	...
10	...	...	...	5.0	p5.1	5.2	5.1	5.1	4.7	4.6	...	...	...
11	...	...	...	5.0	4.9	5.1	5.0	4.9	...	...	...	...	...
12	...	...	...	5.1	5.2	5.0	5.6	4.8	4.7	...	...	...	...
13	...	...	...	...	5.1	5.0	5.2	5.0	4.6	4.5	...	...	...
14	...	...	...	4.9	4.7	5.0	4.9	4.8	4.6	...	...	...	...
15	...	...	...	4.8	4.8	5.0	4.9	4.8	4.7	...	...	...	...
16	...	...	...	4.8	4.8	5.0	5.0	4.9	4.7	...	...	...	...
17	...	...	...	4.8	5.2	5.1	4.9	5.0	p4.8c	...	...	...	...
18	...	...	...	4.9	5.1	q5.1	5.1	5.0	...	...	...	...	...
19	...	...	...	4.7	5.0	5.2	5.0	4.9	4.8	...	...	...	...
20	...	...	...	...	4.9	p5.1c	p5.1c	p5.0c	4.9	5.0	...	...	...
21	...	...	...	...	...	5.1	...	...	...	...	...	...	...
22	...	...	...	5.0	4.8	4.6	4.7	5.1	...	4.6	...	...	...
23	...	...	...	...	5.1	5.0	5.2	5.1	p4.8c	...	...	...	...
24	...	...	...	5.3	5.1h	5.2	5.0	5.2	4.8	...	...	...	...
25	...	...	...	...	5.1	5.1	5.2	5.1	...	...	...	...	...
26	...	...	...	5.2	5.0	5.1	5.0	4.8	...	...	...	...	...
27	...	...	...	...	5.0	4.9	4.9	5.1	...	...	...	...	...
28	...	...	...	5.2	5.2	5.1	5.0	5.0	4.8	...	...	...	...
29	...	...	...	...	5.0	5.3	5.0	4.8	...	...	...	...	...
30	...	...	...	4.9	5.0	5.0	5.1	5.1	4.8	4.6	...	...	...
31	...	...	...	5.0	5.3	4.9	5.0	4.9	4.7	...	...	...	...
MEDIAN*	...	...	...	5.0	5.1	5.1	5.1	5.0	4.8	4.6	...	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF FI REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	...	200	200	200	200	200	...	...	...	...
2	...	...	...	...	...c	...c	...c	...c	...c	...	...	...	...
3	...	...	...	...	...	...	200	200	200	...	...	...	...
4	...	...	...	...	220	220	200	200	200	...	...	...	...
5	...	...	...	220	220	200	200	200	220	...	...	...	...
6	...	...	...	230	210	200	210	210	...	...	...	...	...
7	...	...	...	p220c	p210c	200	210	200	200	230	...	...	...
8	...	...	...	...	...	200	220	220	...	...	...	...	...
9	...	...	...	...	210	210	200	200	200	...	...	...	...
10	...	...	...	220	...	210	210	210	210	230	...	...	...
11	...	...	...	230	210	210	210	210	...	...	...	...	...
12	...	...	...	220	200	210	200	200	200	...	...	...	...
13	...	...	...	...	210	200	200	200	210	200	...	...	...
14	...	...	...	210	200	200	200	200	190	...	...	...	...
15	...	...	...	220	210	200	200	200	200	...	...	...	...
16	...	...	...	220	220	200	200	200	200	...	...	...	...
17	...	...	...	220	210	210	200	210	p210c	...	...	...	...
18	...	...	...	210	210	q210	220	210	...	...	...	...	...
19	...	...	...	210	210	200	210	200	220	...	...	...	...
20	...	...	...	...	210	p200c	p210c	p200c	200	200	...	...	...
21	...	...	...	...	...	200	...	...	...	...	...	...	...
22	...	...	...	220	210	200	210	210	...	230	...	...	...
23	...	...	...	...	210	200	200	200	p200c	...	...	...	...
24	...	...	...	210	200	200	200	220	210	...	...	...	...
25	...	...	...	...	220	220	220	200	...	...	...	...	...
26	...	...	...	210	220	200	210	200	...	...	...	...	...
27	...	...	...	...	210	200	200	210	...	...	...	...	...
28	...	...	...	210	200	200	200	200	200	...	...	...	...
29	...	...	...	...	210	200	200	200	...	...	...	...	...
30	...	...	...	220	200	200	200	200	200	210	...	...	...
31	...	...	...	210	200	210	200	200	200	...	...	...	...
MEDIAN*	...	...	...	220	210	200	200	200	200	220	...	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 406

MAY 1946

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

MAY 1946

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.7	1.6	1.8	2.0	1.8	1.8	2.4	2.4	2.0	2.0	1.8	1.6	1.7
2	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c	...c
3	1.0	0.9	1.7	1.7	1.8	1.8	2.0	1.9	1.9	1.8	1.7	1.7	1.0
4	1.0	1.1	1.8	2.0	2.4	2.4	2.4	2.1	1.9	1.8	1.2	1.0	0.9
5	1.3	1.3	1.8	1.8	1.9	2.0	1.9	1.8	1.8	1.7	1.7	1.7	0.9
6	0.9	0.9	1.7	1.8	1.8	1.8	1.9	1.8	1.8	1.7	1.4	1.0	0.9
7	1.0	q2.0c	q2.3c	p1.8c	p1.8c	2.0	2.0	2.1	1.9	1.8	1.8	1.8	0.9
8	0.9	1.4	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.3	1.0	0.9
9	1.0	1.0	1.6	1.8	1.9	1.9	1.9	1.8	1.8	1.7	1.4	1.0	1.0
10	0.9	0.9	1.0	1.7	1.8	1.8	1.8	1.9	1.8	p1.8c	1.7	1.7	1.0
11	1.0	1.0	1.4	1.7	1.8	1.8	2.0	2.0	1.8	1.7	1.1	1.0	0.8
12	p0.9c	p1.2c	p1.4c	1.7	1.7	1.7	1.8	1.8	1.8	1.7	1.7	0.9	...
13	0.9	1.3	1.4	1.7	1.8	1.8	2.0	2.0	2.0	1.7	1.3	1.0	0.9
14	1.0	1.3	1.4	1.8	1.7	1.8	1.8	1.8	1.7	1.7	1.7	1.0	...
15	0.9	1.0	1.7	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.4	1.0	...
16	0.9	1.0	1.8	1.8	1.9	1.8	1.8	1.9	1.8	1.7	1.4	1.0	0.9
17	1.0	1.0	1.3	1.8	1.8	1.8	1.8	1.5	p1.8c	p1.8c	p1.3c	p1.0c	p0.9c
18	1.0	0.9	1.7	1.8	1.8	q1.8	1.8	1.8	1.8	1.8	1.3	1.1	1.0
19	p1.0c	p1.0c	p1.3c	1.7	1.8	1.9	1.8	1.8	1.8	1.8	1.4	1.0	1.0
20	p1.0c	p1.0c	p1.5c	1.8	1.8	p1.8c	p1.8c	p1.8c	1.7	1.7	1.1	0.9	...
21	1.0	1.1	1.7	p1.7c	1.7	1.8	1.8	1.8	2.0	1.7	1.2	1.0	0.8
22	0.9	0.9	1.0	1.7	1.7	1.8	1.8	1.9	1.8	1.8	1.2	0.9	0.9
23	0.9	0.9	1.1	1.7	1.7	1.7	1.8	1.8	p1.6c	1.4	1.2	0.9	...
24	1.0	0.9	1.0	1.8	1.8	1.8	1.8	1.8	2.1	1.9	1.6	p1.0c	...
25	0.9	0.8	1.0	1.8	1.7	1.8	1.7	1.8	1.7	1.6	1.2	0.9	0.9
26	1.0	1.0	1.0	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.4	1.0	0.9
27	0.8	1.0	1.7	1.6	1.7	1.8	1.8	1.7	1.7	1.7	1.1	0.9	...
28	1.0	0.8	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.1	1.0	0.9
29	1.0	0.9	1.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.0	1.0	1.0
30	1.0	1.0	1.1	1.8	1.8	1.8	1.8	1.8	1.8	1.1	1.0	1.0	0.8
31	1.0	0.9	1.1	1.8	1.8	1.8	1.8	1.8	1.7	1.8	p1.1c	1.0	...
MEDIAN*	1.0	1.0	1.4	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.3	1.0	0.9

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.6	2.6	...	...	...	...	...	...	...	...	...	2.3	1.1j
2	p1.6c	p2.6c	p3.2c	...	...	...	...	...	...	...	...	p2.4c	p1.1c
3	1.5	2.6	3.2	...	...	...	...	...	...	3.4	2.9	2.4	1.2
4	1.6	2.7	3.2	...	...	...	...	...	...	...	...	2.4	1.2
5	1.6	2.6	...	...	...	...	...	...	3.8	...	...	2.2	1.0
6	1.6	2.5	...	3.4	3.6	...	...	...	...	...	2.8	2.3	1.1
7	1.6	2.4j	3.2	...	...	...	...	...	...	...	3.0	2.2	1.0
8	q1.5c	p2.4c	...	3.5	...	...	...	...	3.6	...	2.8	2.2	1.2
9	1.6	2.5	...	...	...	...	...	...	...	...	3.0	2.2	q0.8
10	1.6	2.5	3.2	...	...	...	...	...	...	...	...	2.2	1.0
11	1.2j	2.4	...	...	3.6	...	...	...	...	...	3.0	2.2	1.0
12	p1.4c	p2.4c	p3.2c	3.4	...	...	3.7	3.6	...	...	2.9	2.1	1.0
13	1.4	2.4	3.2	3.4	...	...	...	...	...	...	2.9	2.1	1.0
14	1.3	2.4	3.0	...	...	...	...	...	...	...	2.7	2.0	0.9
15	1.3	2.4	2.9	...	...	...	...	...	...	...	2.8	2.0	0.8
16	1.5	2.6	...	...	...	...	...	...	...	...	2.7	2.1	1.0
17	1.5	2.5	3.0	...	...	...	...	...	...	...	p2.6c	p2.2c	p0.9c
18	1.4	...	...	...	...	q3.9	...	...	3.6	...	2.6	2.2	q0.9
19	p1.4c	p2.4c	p3.0c	...	...	...	...	...	3.6	...	2.6	2.2	1.0
20	p1.4c	p2.4c	p3.1c	3.5	...	...	...	...	...	3.4	2.6	2.0	1.0
21	1.5	2.4	...	...	...	...	...	3.6	...	3.3	2.6	2.1	1.1
22	1.4	2.3	2.8	...	...	3.7	...	...	...	...	2.8	2.0	1.0
23	1.4	2.4	3.0	3.4	...	...	...	...	...	...	2.8	2.0	1.0
24	1.4	q2.3c	...	3.5	3.7	...	...	...	...	3.5	...	p2.0c	1.0j
25	1.5	2.5	3.0	3.5	...	...	...	...	...	3.2	2.8	2.1	1.0
26	1.4	2.5	3.2	...	...	...	...	...	...	...	2.9	2.2	1.2
27	1.4	2.5	...	...	...	...	...	...	3.6	3.2	2.8	2.1	1.0
28	1.4	2.4	...	3.6	...	...	...	...	...	...	2.8	2.2	1.0
29	1.4	2.4	3.0	...	...	...	...	...	...	...	2.8	2.1	0.9
30	1.4	2.3	3.0	...	...	...	...	...	...	...	2.8	2.2	...a
31	1.4	2.4	3.0	...	...	...	3.8	...	...	...	p2.7c	2.1	1.0
MEDIAN*	1.4	2.4	3.0	3.5	...	...	...	...	3.6	3.3	2.8	2.2	1.0

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 407

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1946 | JUNE 1946

CRITICAL FREQUENCY OF F2 REGION EXPRESSED IN MEGACYCLES PER SECOND

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	7.0	7.1	6.6	5.8	5.0	4.5	4.8	6.6	7.9	7.7	7.4	7.3	7.5	7.9	7.8	8.2	8.3	9.0	8.6	7.8	8.1	8.3	7.9	7.7	7.3
2	7.0	7.0	5.5	3.7	3.2	2.8	4.3	7.4	8.7	9.5	9.1	8.4	8.5	8.8	8.6	9.2	10.8	9.0	8.7	8.4	7.7	9.0	7.5	7.1	7.5
3	6.2	5.3	4.3	3.2	2.3	2.0	3.8	6.9	9.0	q 9.1c	9.6	9.7	9.3	9.0	8.9	8.6	8.2	8.4	8.6	7.9	7.6	8.1	7.8	6.8	7.1
4	6.4	5.5	5.3	...f	...f	...f	4.7f	6.4	7.3	7.8	8.1	8.7	9.3	9.1	8.6	p 8.2c	7.9	8.6	8.1	7.3	7.8	8.9	7.8	6.9	...
5	6.0	6.0	5.3	5.0	4.3f	3.7f	4.4	7.4	8.9	9.5	9.7	9.4	8.9	8.8	8.0	8.7	8.6	8.3	8.1	8.4	9.1	8.9	8.0	6.1	7.5
6	6.0	5.8	5.2	5.0	4.5h	3.4	4.1	7.0	9.0	10.1	10.8	10.8	9.4	8.4	8.4	8.0	8.2	8.1	7.5	7.6	7.7	6.9	7.0	7.5	7.4
7	5.9	5.3	5.0	4.9	4.6	4.0	5.2	8.1	8.7	9.6	10.2	11.3	11.2	11.0h	9.8	9.4	8.3	8.2	7.8	7.6	7.5	7.3	6.4	6.2	7.6
8	6.5	6.6	5.8	5.3	...f	...f	...f	7.1f	p8.3c	10.0f	9.0	p 9.3c	q 9.6c	p 9.3c	p 9.1c	q 8.8c	p 8.1c	7.8	7.9	8.4	8.8	8.1	7.0	7.1	...
9	7.5	9.0	9.1	7.4	6.2f	...f	2.9f	5.8	p6.8c	6.9	p 7.4c	p 7.9c	q 8.4c	p 8.4c	p 8.4c	8.4	8.2	8.0	7.6	7.2	7.3	7.2h	6.9	6.0	...
10	5.6	5.4	5.2	4.9	4.0	3.9	4.6	6.7	9.0	9.9	9.5	8.3	7.9	8.0	8.6	8.3	8.8	8.3	8.0	8.1	8.0	8.1	7.8	5.3	7.2
11	4.7	5.0	5.2	5.0	4.1	4.5	4.7	p6.9c	8.3	9.1	8.4	8.7	8.2	8.4	8.8	8.6	9.9	9.7	8.9	8.9	8.1	7.9	8.2	7.9	7.4
12	7.6	7.3	6.4	6.0	5.2	4.5	4.5	5.5	7.4	8.4	7.8	7.9	8.3	9.1	p 9.6c	9.8	9.3	8.8	7.8	7.1	7.0	7.0	7.5	7.1	7.4
13	7.1	7.0	7.0	7.0f	6.7	4.7	4.6	6.8	8.4	9.4	p 9.8c	10.1	9.7	9.9	10.9	11.7	11.8	10.8	10.2	8.9	9.0	9.2	7.9	7.9	8.6
14	8.8	7.4	6.4	4.3	2.5	2.2	3.7	6.9	8.4	8.4	9.0	q 8.5c	9.0	9.0	8.9	8.6h	8.9	7.8	7.3	6.6	5.7	6.6	6.7	6.6	7.0
15	6.0j	5.7j	6.4	5.6	5.2	5.6	5.3	7.3	8.4	8.9	8.8	8.4	8.6	p 8.8c	9.0	p 8.9c	p 8.8c	8.7	8.7	p8.5c	8.3	p7.9c	p7.4c	q7.0c	7.6
16	p6.5c	p6.1c	q5.6c	p4.7c	p4.2c	p3.8c	q4.3c	p7.0c	p9.1c	9.7	p 9.2c	9.6	9.2	p 8.6c	8.5	8.4	p 8.4c	p 7.6c	p 6.8c	q6.0c	p6.8c	p7.6c	...f	...f	...
17	8.0	...f	...f	...f	...f	q5.4c	q5.5c	q6.7c	p9.2c	9.6	9.1	9.3	8.6	p 9.3c	p 9.1c	p 8.6c	p 8.8c	9.1	8.5	8.6	8.2	7.3	7.0	7.9	...
18	8.3	7.4	7.0	6.0	4.4	3.7	4.2	6.9	8.0	7.8	7.5	7.6	7.9	7.4	8.7	8.8	9.2	9.0	8.3	7.3	6.7	...f	...f	...f	...
19	...f	...f	5.1	4.5f	4.5f	3.6f	4.3f	7.7	9.4	9.6	9.6	9.0	9.6	9.6	9.5	9.3	9.2	9.2	8.7	8.3	8.0	7.9	7.4	6.6	...
20	6.5	7.2	6.9	7.0	4.8	2.6	3.8	7.0	8.5	8.4	7.8	8.1	8.9	8.3	8.4	8.6	8.3	8.4	8.4	8.3	7.3	...f	...f	7.0	...
21	7.5	7.0	6.4	5.9	5.2	4.5	5.8	7.5h	8.3	8.7	8.8	8.3	8.3	9.2	8.5	9.0	9.2	8.8	8.1	7.8	7.5	p7.1c	7.2	7.2	7.6
22	7.1	q6.4f	6.3	5.2	5.2	4.0	4.5	7.5	9.0	9.4	9.0	8.4	8.2	8.4	8.5	9.0	8.6	8.6	9.5	8.6	8.7	8.1	8.3	8.8	7.7
23	7.3	6.8	5.1	3.0	2.5	2.6f	3.2f	6.6	8.0	p 8.4c	8.8	8.4	7.8	8.7	8.3	7.9	7.7	8.0	7.3	6.8	...f	...f	5.8f	5.9	...
24	...f	5.8f	4.8	4.3	3.5	2.7	4.1	7.3	8.5	9.2	9.6	8.8	8.8	9.2	8.9	8.9	8.9	9.6	9.6	8.4	7.9	7.9	8.1	7.0	...
25	7.4	8.6	6.7	5.2	2.8	2.0	3.8	7.4	9.4	9.9	8.8h	8.8	10.1	10.1	9.9	p 9.6c	9.2	8.9	8.3	q8.1c	p8.0c	p7.8c	7.3	6.9	7.7
26	6.2	6.4	5.7	6.1	5.0	3.8	4.1	7.3	8.8	p 8.6c	8.3	8.0	9.0	9.1	9.1	9.3	9.2	9.4	8.6	7.1	7.0	7.5	7.2	6.9	7.4
27	6.8	p7.2c	...c	...c	...c	...c	...c	...c	...c	q 9.0c	9.4	9.1	9.2	9.3	9.3	8.6	8.7	9.4	9.3	9.3	p9.1c	p8.8c	p8.6c	8.1	...
28	7.2	7.4	7.8	6.9	5.9	4.7	4.5	7.1	8.7	9.2	8.7h	8.4	8.3	8.9	8.8	8.6	8.8	9.0	8.9	8.7	8.3	7.5	8.3	8.1	7.9
29	8.1	8.4	8.5	8.4	7.8	6.3	4.9	7.0	8.8	10.0	9.6	8.9	8.6	8.5	7.8	8.1	7.8	7.8	7.7	7.1	7.0	7.5	6.9	6.8	7.8
30	6.8	7.3	...c	...c	...c	...c	...c	...c	...c	8.8	p 9.0c	p 8.5c	p 8.8c	p 9.2c	9.5	9.2	8.3	8.7	7.9	6.9	6.8	7.2	6.9	7.2	...
31																									
MEDIAN*	6.9	6.9	5.8	5.2	4.5	3.8	4.4	7.0	8.6	9.2	9.0	8.6	8.8	9.0	8.8	8.6	8.8	8.7	8.3	8.0	7.8	7.9	7.4	7.0	7.5

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE

d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED

j = ORDINARY-WAVE ~~CRITICAL~~ FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY K = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 408

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1946 MINIMUM VIRTUAL HEIGHT OF F2 REGION EXPRESSED IN KILOMETERS JUNE 1946

(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED — 75° WEST MERIDIAN MEAN TIME)

DAY	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN
1	220	230	230	240	230	240	290	240	230	300	300	360	360	350	320	310	230	250	280	300	290	250	240	230	272
2	220	210	220	250	240	250	280	250	220	210	340	370	330	320	300	210	220	250	300	330	300	260	220	220	263
3	210	220	220	220	240	260	280	250	220	220	340	360	330	320	360	220	220	240	270	300	310	280	240	230	265
4	220	230	220	230	250	270	300	260	230	320	240	350	350	330	210	p220c	230	240	300	300	260	230	230	220	260
5	220	210	220	220	240	250	270	240	230	280	300	290	350	290	280	340	220	260	270	250	240	210	210	210	254
6	230	230	230	240	240	230	260	240	230	300	220	330	330	310	440	360	220	250	300	300	240	270	220	210	268
7	230	230	260	280	270	270	280	230	240	230	300	340	360	360	320	210	230	270	300	300	250	240	240	240	270
8	250	240	250	280	330	330	280	240	p230c	290	300	320	340	360	280	340	240	260	290	270	220	220	240	250	277
9	240	260	270	290	380	330	310	250	p250e	200	340	380	350	320	380	200	230	260	280	280	260	220	230	220	280
10	230	230	230	230	240	250	270	240	230	210	320	350	320	390	310	300	220	250	280	290	270	220	210	220	263
11	230	240	220	230	260	240	290	240	230	280	290	340	370	340	320	210	240	250	280	290	280	280	240	230	268
12	230	230	230	250	240	220	300	260	240	320	200	320	310	320	320	330	230	250	310	360	340	280	240	240	274
13	250	310	300	250	230	210	290	250	230	220	220	320	290	280	330	200	220	250	300	310	310	270	240	230	263
14	220	220	200	210	240	270	290	240	220	220	300	320	350	350	330	210	230	260	320	370	370	290	240	230	271
15	220	220	240	240	260	230	270	250	240	290	350	320	340	340	320	330	p220e	250	280	280	280	240	230	230	270
16	210	220	210	220	240	240	240	250	p220	210	p200e	310	360	270	210	230	p240	260	300	340	370	360	p260f	240	259
17	250	280	300	270	240	240	300	250	p240c	220	280	200	300	p360e	330	210	240	250	280	300	290	280	280	240	268
18	240	230	230	230	240	220	300	250	230	210	200	360	360	300	420	330	230	250	320	370	380	350	350	270	286
19	230	240	270	250	210	240	260	250	240	220	320	310	300	280h	200	210	230	260	300	320	310	280	250	250	260
20	250	250	250	250	230	230	290	250	240	230	330	410	360	310	210	230	220	270	290	300	360	340	280	240	276
21	220	230	230	240	240	270	300	260	240	220	210	200	340	370	210	210	250	270	310	370	370	270	230	230	262
22	240	240	240	230	240	240	260	260	250	230	220	350	390	300	360	370	240	270	280	280	290	260	240	230	271
23	230	230	220	260	280	350	310	270	250	290	300	330	350	370	300	230	250	260	310	370	370	330	240	230	289
24	220	220	240	230	230	240	250	250	230	290	300	290	470h	320	300	210	230	260	270	330	320	300	260	240	271
25	240	240	220	230	240	270	290	240	240	220	280	380	380	330	280	p250e	220	270	300	310	270	250	230	250	268
26	240	240	240	230	220	230	260	240	220	p210c	200	310	350	300	330	210	230	260	310	340	320	270	250	240	260
27	230	240	...c	...c	...c	...c	...c	...c	...c	290	280	320	320	340	340	330	240	270a	270	260	p250c	p240c	230	220	...
28	230	240	230	220	210	210	240	230	210	280	270	340	360	330	300	330	240	260	280	290	320	290	240	240	266
29	250	280	260	230	210	220	220	240	220	210	270	290	350	400h	340	400	240	260	290	300	290	260	240	230	271
30	250	p260c	...c	...c	...c	...c	...c	...c	...c	220	380	p350c	p330c	p300c	200	200	220	260	310	330	310	260	220	220	...
31																									
MEDIAN*	230	230	230	235	240	240	280	250	230	225	295	330	350	325	320	230	230	260	295	300	295	265	240	230	265

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

TABLE 409

JUNE 1946

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

JUNE 1946

F1 REGION CRITICAL FREQUENCY EXPRESSED IN MEGACYCLES PER SECOND AND MINIMUM VIRTUAL HEIGHT EXPRESSED IN KILOMETERS
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	CRITICAL FREQUENCY OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	4.8	4.8	5.0	5.1	5.0	4.7	4.5	...	...	...
2	...	...	...	...	5.2	5.2	5.0	4.8	4.7	...	...	...	...
3	...	...	...	...	4.9	5.3	5.0	4.9	5.0	...	...	...	...
4	...	...	...	4.9	4.8	5.1	5.1	4.9	...	...	...	...	...
5	...	...	...	4.7	5.1	4.9	4.8	4.6	4.7	4.8	...	...	...
6	...	...	...	5.0	...	4.9	4.9	4.9	5.0	4.8	...	...	...
7	...	...	...	...	4.8	4.8	5.1	4.8	4.7	...	...	...	...
8	...	...	...	4.7	5.1	5.0	5.1	5.0	4.5	4.6	...	...	...
9	...	...	...	...	4.8	5.0	5.0	4.8	5.1	...	...	...	...
10	...	...	...	...	4.7	5.0	4.8	5.2	4.6	4.5	...	...	...
11	...	...	...	4.7	4.7	5.0	5.1	4.9	4.7	...	...	...	...
12	...	...	...	4.9	...	5.0	5.0	4.8	4.7	4.6	...	...	...
13	...	...	...	...	p4.8c	5.2	5.0	4.8	5.2	...	...	...	...
14	...	...	...	...	4.9	4.9	5.3	5.0	5.2	...	...	...	...
15	...	...	...	5.1	5.2	5.0	5.2	q5.0c	4.8	q4.8c	...	...	...
16	...	...	...	...	p5.0c	5.1	5.3	4.9	...	...	...	...	...
17	...	...	...	...	4.7	...	5.0	p5.3c	q5.1c	...	...	...	...
18	...	...	...	...	...	5.2	5.1	5.0	5.5	4.6	...	...	...
19	...	...	...	...	5.1	5.2	5.0	4.7h	...	...	...	...	...
20	...	...	...	...	5.0	5.4	5.0	4.8	...	...	...	...	...
21	...	...	...	...	...	...	5.2	5.3	...	...	...	...	...
22	...	...	...	...	...	5.4	5.4	5.0	5.2	5.1	...	...	...
23	...	...	...	4.7	4.8	5.3	5.2h	5.3	4.7	...	...	...	...
24	...	...	...	5.2	5.1	5.0	5.6h	5.0	4.6	...	...	...	...
25	...	...	...	...	4.7	5.5	5.4	5.2	4.6h	...	...	...	...
26	...	...	...	...	...	5.1	5.2	4.8	5.3	...	...	...	...
27	...	...	...	p5.2c	5.0	5.3	5.4	5.1	5.1	5.0	...	...	...
28	...	...	...	5.0	5.1	5.2	5.3	5.2	4.8	5.2	...	...	...
29	...	...	...	...	5.0	5.3h	5.1	5.3h	4.9	5.3	...	...	...
30	...	...	...	...	5.5	p5.4c	p5.3c	p5.2c	...	...	...	...	...
31													
MEDIAN*	...	...	...	4.9	5.0	5.1	5.1	5.0	4.8	4.8	...	...	...

DAY	MINIMUM VIRTUAL HEIGHT OF F1 REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	...	...	...	220	200	210	200	200	200	220	...	...	...
2	...	...	...	...	210	200	220	200	210	...	...	...	...
3	...	...	...	...	220	200	210	200	200	...	...	...	...
4	...	...	...	220	220	200	210	210	...	...	...	...	...
5	...	...	...	220	200	210	200	200	200	210	...	...	...
6	...	...	...	210	...	210	220	190	210	230	...	...	...
7	...	...	...	...	220	220	220	220	210	...	...	...	...
8	...	...	...	210	220	200	200	210	200	220	...	..	...
9	...	...	...	...	200	190	200	200	200	...	...	...	...
10	...	...	...	...	230	200	200	190	210	210	...	...	...
11	...	...	...	200	210	200	200	210	200	...	...	...	...
12	...	...	...	220	...	200	210	200	220	230	...	...	...
13	...	...	...	...	p220c	220	200	200	210	...	...	...	...
14	...	...	...	...	200	200	200	200	200	...	...	...	...
15	...	...	...	200	220	210	210	220	210	230	...	...	...
16	...	...	...	...	p220c	210	200	200	...	...	...	...	...
17	...	...	...	...	210	...	200	200	200	...	...	...	...
18	...	...	...	...	...	200	210	200	200	220	...	...	...
19	...	...	...	...	220	210	200	200	...	...	...	...	...
20	...	...	...	...	210	220	200	200	...	...	...	...	...
21	...	...	...	...	...	...	210	200	...	...	...	...	...
22	...	...	...	...	...	210	210	200	220	220	...	...	...
23	...	...	...	220	210	210	200	200	210	...	...	...	...
24	...	...	...	220	210	190	200h	190	200	...	...	...	...
25	...	...	...	...	210	210	220	200	200	...	...	...	...
26	...	...	...	...	...	210	210	200	200	...	...	...	...
27	...	...	...	q210c	190	200	200	200	200	200	...	...	...
28	...	...	...	190	180	200	200	200	200	210	...	...	...
29	...	...	...	...	190	200	210	210	220	230	...	...	...
30	...	...	...	...	p200c	p200c	p210c	p210c	...	...	...	...	...
31													
MEDIAN*	...	...	...	215	210	200	200	200	200	220	...	...	...

* = ALL TABULATED VALUES a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E b = LOSS OF RECORD DUE TO ABSORPTION c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER e = BELOW LOWER LIMIT OF RECORDER f = SPREAD ECHOES PRESENT g = f^0F2 EQUAL TO OR LESS THAN f^0F1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY k = IONOSPHERIC STORM IN PROGRESS p = INTERPOLATED VALUE q = DOUBTFUL VALUE

IONOSPHERIC RESULTS AT HUANCAYO MAGNETIC OBSERVATORY

 JUNE 1946

MINIMUM RECORDED FREQUENCY AND CRITICAL FREQUENCY OF THE E REGION EXPRESSED IN MEGACYCLES PER SECOND
(TABULAR VALUES OBTAINED IN FIRST FIFTEEN MINUTES FOLLOWING THE HOURS INDICATED— 75° WEST MERIDIAN MEAN TIME)

DAY	MINIMUM RECORDED FREQUENCY												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0	1.0	1.0	1.2	1.2	1.7	2.5	2.5	1.8	1.7	1.0	0.9	...
2	1.0	0.9	1.0	1.8	1.4	1.7	2.5	2.6	1.7	1.4	1.1	1.0	...
3	1.0	1.0	0.9	1.0	1.8	1.8	2.5	2.5	1.7	1.2	1.2	1.0	...
4	1.0	0.9	1.0	1.8	2.5	2.6	2.6	2.6	1.8	p1.2c	1.0	1.0	...
5	1.0	1.0	1.0	1.2	1.7	1.7	1.7	1.8	1.7	1.1	1.0	0.9	...
6	1.0	1.0	1.1	...	1.8	1.8	1.8	1.7	1.7	1.0	1.0	1.0	0.9
7	1.0	1.0	1.1	1.2	1.8	1.8	1.8	1.7	1.2	1.3	1.0	0.9	...
8	0.9	1.0	p1.1c	1.4	1.6	2.5	2.4	1.6	1.7	1.5	1.6	1.0	0.9
9	0.9	0.9	p1.0c	1.6	1.6	1.6	p1.6c	1.6	1.4	1.1	1.0	1.0	...
10	0.9	0.9	1.0	1.7	1.7	1.7	1.7	1.8	1.6	1.2	1.0	0.9	0.9
11	0.9	0.9	1.0	1.6	1.8	1.8	1.8	1.8	1.8	1.0	0.8	1.0	...
12	0.9	1.0	0.9	1.4	1.8	1.8	1.8	1.8	1.8	1.3	1.2	1.0	...
13	0.9	1.0	1.5	1.6	p1.8c	1.8	1.9	2.0	1.6	1.6	1.2	1.0	1.0
14	0.9	1.0	1.0	1.8	1.8	2.2	1.8	1.7	1.6	1.4	1.0	1.0	...
15	0.9	1.0	1.0	1.6	1.6	1.7	2.0	p1.9c	1.8	1.6	p1.0c	0.9	0.9
16	q0.9c	p1.0c	p1.7c	1.6	p1.7c	1.8	1.7	1.8	1.9	1.8	p1.5c	1.3	...
17	p0.9c	1.0	p1.5c	1.7	1.9	1.9	1.8	1.7	1.8	p1.6c	1.4	0.9	0.9
18	1.0	1.2	1.2	1.8	1.[illegible]	1.9	2.0	1.9	1.9	1.9	1.2	1.2	...
19	...	1.3	2.0	2.0	2.0	2.0	2.4	2.0	2.0	1.4	1.2	1.2	...
20	1.2	1.1	1.2	1.4	1.7	1.8	1.9	2.0	1.7	1.4	1.4	1.2	...
21	...	1.2	1.2	1.4	2.0	2.0	2.0	1.9	2.0	1.5	1.2	1.2	...
22	...	1.4	1.4	1.9	1.8	1.9	2.0	2.0	2.5	1.7	1.4	1.4	...
23	...	1.2	1.2	1.7	1.7	1.9	1.9	1.9	1.8	1.1	1.0	0.9	0.9
24	0.9	0.9	1.1	1.9	2.0	1.9	1.9	1.8	1.7	1.6	1.0	0.9	0.7
25	0.9	0.9	1.0	1.6	2.1	2.3	2.4	2.2	1.9	p1.4c	1.0	1.0	0.9
26	0.9	1.1	1.7	p1.9c	2.0	2.2	2.4	2.3	2.0	1.4	1.1	0.9	0.9
27	p0.9c	p1.0c	p1.4c	1.8	2.1	p2.0c	2.0	2.5	2.0	1.8	1.3	0.9	0.9
28	1.0	0.9	1.2	1.2	1.9	2.0	2.4	2.5	2.2	1.6	1.4	0.9	0.9
29	...	1.1	1.2	1.7	1.7	1.7	3.4	2.2	2.3	1.6	1.0	1.0	...
30	p0.9c	p1.0c	p1.1c	1.4	...c	...c	...c	...c	1.9	1.4	1.0	0.8	0.9
31													
MEDIAN*	0.9	1.0	1.1	1.6	1.8	1.8	2.0	1.9	1.8	1.4	1.1	1.0	0.9

DAY	CRITICAL FREQUENCY OF E REGION												
	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.4	2.4	...	...	...	...	...	...	...	...	...	2.1	1.0
2	1.4	2.2	...	...	...	...	...	...	...	...	2.8	1.8	1.0
3	1.4	2.4	...	...	...	...	...	...	...	3.3	...	2.2j	1.2
4	1.4	2.2j	...	...	...	...	...	...	...	...c	2.8	2.0	...
5	1.4	2.4	3.0	...	...	...	...	...	...	...	...	2.0j	...
6	1.3	...	...	...	...	...	...	...	...	...	2.6	2.0	0.9
7	1.4	2.4	2.8	...	...	...	...	...	...	3.1	2.6	2.0	0.9
8	1.2	2.3	p2.7c	...	...	...	...	...	...	...	...	2.1	1.0
9	1.2	2.2	p2.6c	...	...	...	...	...	...	3.0	2.7	2.0	0.8
10	1.2	2.4	2.8	...	...	...	...	...	...	...	2.7	2.1	1.0
11	1.4	2.4	2.8	...	...	...	...	...	...	...	2.8	2.0	1.0
12	1.4	2.4	...	...	...	...	...	...	...	...	...a	2.0a	1.0j
13	1.4	2.3	...	...	...	...	...	...	...	...	2.7	2.2	1.0
14	1.4	2.4	2.4	...	...	...	...	...	...	...	2.7	2.2	1.0
15	1.4	2.4	3.0	...	...	...	...	...	...	...	...a	2.2	...a
16	q1.2c	p2.4c	p3.3c	...	...	...	...	...	...	...	...	p2.2c	...
17	1.4	2.5	p3.2c	...	...	...	...	...	...	...	...	2.2	1.0
18	1.2	2.3	...	...	...	...	...	...	...	...	2.8	2.1	1.0
19	1.2	2.3	...	...	...	...	...	...	...	...	2.8	2.1	...
20	1.4	2.4	...	...	...	...	...	...	...	...	...	2.2	0.9
21	1.2	2.3	...	...	...	...	...	...	...	...	...	2.2	0.9
22	1.2	2.4	...	...	...	...	...	...	...	...	...	2.2	...
23	1.1	2.3	...	...	...	...	...	...	...	...	2.9	2.2	1.0
24	1.0	2.4	...	...	...	...	...	...	...	...	2.8	2.2h	...a
25	1.4	2.4	...	...	...	...	...	...	...	...	2.4j	2.1	1.1
26	1.4	2.3	...	...	...	...	...	...	...	...	2.9	2.2	1.0
27	p1.4c	p2.3c	...c	...	...	...	...	...	...	...	2.8	...a	1.0
28	1.3	2.3	2.9	...	...	...	...	...	...	...	2.8	2.2	1.2
29	1.2	2.4	2.9	...	...	...	...	...	...	...	2.8	2.2	1.1
30	p1.2c	p2.4c	...c	3.4	...	...	...	...	...	...	...	2.0	1.1
31													
MEDIAN*	1.4	2.4	2.9	...	...	...	...	...	...	...	2.8	2.1	1.0

* = ALL TABULATED VALUES   a = NOT MEASURABLE OWING TO SPORADIC OR ABNORMAL E   b = LOSS OF RECORD DUE TO ABSORPTION   c = RECORD LOST BY EQUIPMENT FAILURE OR INTERFERENCE
d = BEYOND UPPER LIMIT OF RECORDER   e = BELOW LOWER LIMIT OF RECORDER   f = SPREAD ECHOES PRESENT   g = f^oF2 EQUAL TO OR LESS THAN f^oF1 h = STRATIFICATION OBSERVED
j = ORDINARY-WAVE CRITICAL FREQUENCY DEDUCED FROM MEASURED EXTRAORDINARY-WAVE CRITICAL FREQUENCY   k = IONOSPHERIC STORM IN PROGRESS   p = INTERPOLATED VALUE   q = DOUBTFUL VALUE

MONTHLY MEDIAN VALUES OF CRITICAL FREQUENCY OF THE F2-REGION

Following a recommendation of the International Radio Wave Propagation Conference held in April, 1944, the Interservice Radio Propagation Laboratory requested that the reported monthly values of ionospheric characteristics be changed from arithmetic mean to median values for each hour. This change was made at Huancayo in January, 1945. Ionospheric data published for that station for the years prior to 1945 therefore are not homogeneous with later data.

In 1946, in a study of the data by A. H. Shapley, the hourly values of f^oF2 at Huancayo for the period 1938 to 1945 were entered on punch-cards, and it was a relatively small task to extract median values by machine computation. Tables 411 to 418 list median values for every hour for every month, 1938 to 1945, inclusive.

Comparison of the mean values given on the monthly tabulations of data in the preceding section of this volume with the median values shows a mean difference of about 0.2 mc. The largest discrepancies appear in the hours before midnight when variable conditions occur frequently, and differences as large as 2.5 mc are found.

Table 411. Monthly median values of critical frequency of the F2-region (f^oF2) for each hour of the day on 75th west meridian mean time, expressed in megacycles per second, 1938

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
00	8.2	9.5	10.5	9.7	7.6	7.2	7.7	7.9	8.5	9.8	9.5	7.8
01	7.5	8.9	9.2	8.2	7.2	6.8	7.3	7.7	7.9	8.8	9.0	7.8
02	7.6	8.2	7.8	6.9	6.6	6.3	7.4	7.0	7.0	7.6	8.2	7.8
03	6.3	6.6	6.6	6.4	5.8	5.2	6.3	5.9	6.1	7.0	7.3	7.0
04	5.7	6.4	5.5	5.7	5.1	4.5	5.4	4.9	5.4	6.0	6.1	6.0
05	5.0	5.3	4.7	4.4	5.1	4.1	4.6	4.5	5.0	5.0	5.2	4.7
06	7.0	6.3	5.8	5.7	5.6	4.4	4.7	5.4	6.7	8.0	8.8	8.0
07	9.8	9.8	9.7	9.7	8.8	7.1	7.3	8.5	9.6	11.0	11.4	10.7
08	11.4	11.9	12.0	11.7	10.6	9.0	9.3	10.3	11.3	12.7	13.0	12.5
09	12.0	12.9	12.6	12.4	11.5	9.2	9.9	11.0	12.1	13.0	13.6	13.0
10	11.9	13.3	12.6	11.8	11.5	9.4	9.9	10.9	12.0	12.8	13.4	13.3
11	11.0	13.2	12.4	11.7	10.6	9.2	9.9	10.9	11.4	11.9	13.5	12.3
12	10.9	12.5	12.3	11.4	10.3	9.2	9.7	10.7	11.0	11.5	13.1	11.8
13	11.4	12.5	12.0	11.6	10.2	9.2	9.7	10.6	11.2	11.7	13.0	12.0
14	11.6	12.3	11.8	11.8	10.2	9.4	9.5	10.2	11.5	11.8	12.6	12.0
15	11.9	12.0	12.2	11.8	10.2	9.6	9.4	10.0	11.3	12.2	12.5	12.2
16	12.0	12.3	12.1	11.8	10.2	9.5	9.5	9.7	10.7	12.2	12.1	12.4
17	12.1	11.9	12.4	11.4	10.0	9.3	9.2	9.6	10.5	12.2	12.0	12.4
18	12.0	11.0	11.9	10.7	9.4	8.8	8.9	9.3	10.0	11.9	11.7	12.2
19	11.2	10.8	10.2	9.8	8.4	8.2	8.2	8.4	8.8	11.0	11.0	11.0
20	10.2	9.8	9.9	9.4	8.7	8.3	8.0	8.1	11.6	10.0	10.0	10.1
21	9.7	10.7	11.8	9.8	8.6	8.2	8.2	8.5	10.9	11.0	9.7	9.2
22	9.1	9.9	11.2	10.0	8.0	7.9	8.0	8.6	9.8	11.0	9.6	9.0
23	9.0	10.1	11.8	9.5	7.8	7.4	7.4	8.5	9.3	10.7	9.9	8.7

Table 412. Monthly median values of critical frequency of the F2-region (f^oF2) for each hour of the day on 75th west meridian mean time, expressed in megacycles per second, 1939

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
00	7.8	9.6	10.6	9.4	8.2	7.4	7.2	7.8	8.2	9.8	7.9	7.0
01	7.1	8.6	9.0	8.4	7.7	7.2	6.8	7.4	7.7	8.4	7.6	6.5
02	6.2	7.5	6.8	7.8	6.9	6.8	6.2	7.0	6.5	7.5	7.2	6.0
03	5.8	7.0	5.8	6.0	6.1	5.7	5.5	5.8	5.8	6.8	6.4	6.2
04	5.0	6.7	5.2	5.3	5.6	5.1	5.0	4.8	5.3	6.2	5.8	5.5
05	4.0	6.1	4.4	5.0	5.4	4.3	4.5	4.4	4.9	5.6	5.3	5.2
06	6.7	7.0	5.8	6.0	5.8	4.7	4.4	5.0	7.0	8.5	8.3	7.5
07	9.3	9.7	9.3	9.2	8.8	7.6	7.0	7.6	10.0	11.7	10.8	9.6
08	10.7	11.2	11.0	11.2	10.3	9.4	8.6	9.1	11.6	13.2	12.1	11.1
09	10.8	12.2	12.0	12.0	11.0	9.9	9.2	9.8	12.6	13.7	12.8	11.8
10	9.8	12.6	12.2	12.1	11.0	9.7	9.0	9.6	12.4	13.4	13.0	11.8
11	9.8	11.9	11.5	11.3	10.6	9.5	8.8	9.3	12.1	12.8	12.6	11.6
12	10.2	11.0	10.9	11.3	10.7	9.4	8.8	9.2	11.7	12.2	12.6	11.3
13	10.8	11.0	11.0	11.4	10.5	9.2	8.6	9.3	11.6	11.8	12.5	11.5
14	11.2	11.0	11.2	11.5	10.5	9.3	8.6	9.5	11.5	11.6	12.4	11.8
15	11.8	11.6	11.5	11.9	10.4	9.3	8.7	9.4	11.1	11.9	12.4	11.8
16	12.2	11.6	11.2	12.0	10.2	9.2	8.9	9.3	10.6	12.0	12.4	11.8
17	12.2	11.6	11.1	12.0	10.2	8.9	8.7	9.1	10.4	12.0	12.0	11.5
18	12.2	11.6	10.9	11.3	9.9	8.6	8.6	8.9	10.0	11.9	11.2	11.4
19	11.7	10.6	10.2	10.1	9.2	7.8	8.1	8.5	8.7	10.9	10.0	11.0
20	10.2	10.0	9.4	10.5	9.3	8.0	8.2	8.2	8.4	10.2	9.0	9.6
21	9.8	10.8	9.9	10.6	8.5	7.9	8.1	8.3	8.8	10.1	8.5	8.8
22	9.5	10.5	11.2	10.4	8.6	7.7	7.8	8.4	8.9	10.2	8.2	8.0
23	8.6	10.4	10.5	9.6	8.5	7.8	7.6	8.2	8.4	10.3	8.4	7.4

Table 413. Monthly median values of critical frequency of the F2-rection (f^oF2) for each hour of the day on 75th west meridian mean time, expressed in megacycles per second, 1940

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
00	6.9	8.8	8.9	8.0	6.4	6.2	6.4	6.9	8.4	10.3	7.1	6.4
01	6.0	7.7	8.3	7.4	6.2	5.9	6.2	6.8	7.5	8.6	6.4	5.6
02	5.2	6.6	6.8	6.3	5.4	5.6	6.2	6.2	6.5	7.1	5.7	4.9
03	4.7	5.9	5.8	5.2	4.8	4.6	5.4	5.4	5.6	6.2	5.1	4.4
04	3.9	5.6	5.1	4.6	4.3	4.0	4.6	4.4	4.8	5.5	4.4	4.2
05	3.7	4.8	4.2	4.0	3.8	3.8	4.0	3.8	4.2	5.2	4.2	4.2
06	6.1	5.5	5.5	5.3	4.8	4.0	4.2	4.4	5.7	7.4	7.7	6.8
07	8.5	8.4	8.9	8.5	7.8	6.3	6.5	7.0	8.8	10.4	10.0	9.2
08	9.8	10.2	11.0	10.3	9.4	7.8	8.2	8.7	10.3	12.0	11.2	10.2
09	10.1	11.2	11.7	11.0	10.1	8.0	8.6	9.2	11.2	12.6	12.0	10.7
10	10.0	11.7	11.7	10.4	9.6	8.1	8.3	9.1	10.8	12.4	11.8	10.6
11	9.0	11.1	11.1	10.1	9.0	8.1	8.3	9.2	10.2	11.0	11.8	10.8
12	9.2	10.2	10.9	10.0	8.7	8.0	8.2	8.8	9.8	10.7	11.4	10.5
13	9.6	10.2	10.9	10.4	8.6	8.2	8.2	8.8	9.8	10.9	11.6	10.5
14	10.1	10.7	11.0	10.9	8.8	8.2	8.2	8.8	10.0	11.3	11.6	11.0
15	10.3	10.8	11.1	11.2	8.8	8.4	8.4	8.8	10.0	11.8	11.7	11.5
16	10.9	10.9	11.2	11.2	8.8	8.6	8.4	8.9	10.2	11.6	11.2	11.6
17	11.2	10.9	11.0	11.2	8.6	8.6	8.2	8.8	10.0	11.8	11.4	11.2
18	11.5	10.6	10.6	10.6	8.4	8.3	7.8	8.4	9.8	11.5	11.2	11.0
19	10.6	10.3	9.8	9.5	8.2	7.6	7.2	7.8	9.0	11.0	10.6	10.5
20	9.9	9.4	9.6	9.0	8.4	7.6	7.0	7.6	8.8	10.6	9.5	9.7
21	9.0	9.2	9.5	8.8	8.3	7.8	7.2	7.8	9.2	10.6	9.0	8.6
22	8.4	9.3	9.4	8.8	7.8	7.6	6.9	7.8	8.8	10.8	8.5	7.8
23	7.8	9.0	9.4	8.1	6.9	6.9	6.9	7.4	8.6	10.4	7.8	7.3

Table 414. Monthly median values of critical frequency of the F2-region (f^oF2) for each hour of the day on 75th west meridian mean time, expressed in megacycles per second, 1941

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
00	6.3	8.4	8.5	7.4	5.4	4.9	5.4	6.8	7.4	8.0	6.6	5.5
01	5.5	7.4	7.2	7.1	4.8	4.7	5.2	6.3	6.6	6.7	5.8	4.7
02	4.7	6.3	5.4	5.8	4.5	4.8	5.0	5.8	5.8	5.9	5.0	4.4
03	4.3	5.6	4.7	4.5	3.8	4.4	4.6	4.9	5.0	5.1	4.8	4.3
04	3.7	5.0	4.0	4.0	3.3	3.6	3.6	4.5	4.6	4.5	4.2	3.8
05	3.2	4.8	3.4	3.2	3.2	3.5	2.9	3.8	4.2	4.0	3.5	3.5
06	5.7	5.2	4.9	4.5	3.3	3.5	3.1	3.8	5.3	6.5	6.8	6.7
07	8.2	8.2	8.1	7.6	6.6	5.8	5.9	6.5	8.0	8.8	9.2	8.5
08	9.5	9.6	9.9	9.2	8.0	7.3	7.2	8.0	9.2	10.2	10.2	9.8
09	9.5	10.2	10.4	9.6	8.8	7.6	7.4	8.6	9.5	10.7	10.5	10.0
10	9.4	10.4	10.5	9.2	8.2	7.2	7.1	8.2	9.0	10.8	10.5	10.2
11	9.1	10.2	9.5	8.4	7.7	7.2	7.0	7.9	8.6	9.8	10.0	9.3
12	9.1	9.8	9.2	8.4	7.5	7.1	7.0	8.0	8.4	9.2	10.0	9.3
13	9.3	9.7	9.1	8.9	7.4	7.3	7.1	8.0	8.6	9.4	10.2	9.9
14	9.8	10.2	9.5	9.4	7.6	7.3	7.1	8.0	8.8	9.4	10.4	10.5
15	10.1	10.8	10.0	9.8	8.0	7.6	7.2	8.2	8.7	9.8	10.8	10.9
16	10.4	10.7	10.2	9.7	8.3	7.7	7.4	8.2	8.9	10.1	10.8	11.3
17	10.6	10.4	10.4	9.8	8.2	7.7	7.4	8.1	8.8	10.2	11.0	11.1
18	10.5	10.5	10.0	9.5	7.8	7.4	7.4	8.2	8.8	10.0	10.9	11.0
19	10.1	10.0	9.8	8.8	7.4	6.8	7.1	7.7	8.2	9.3	10.0	10.6
20	9.3	9.4	9.4	8.6	7.2	6.8	7.1	7.3	7.8	8.3	9.8	9.5
21	8.2	9.0	9.6	8.8	7.5	6.9	7.0	7.3	8.0	8.1	8.6	8.2
22	7.8	8.6	9.2	8.8	6.7	6.2	6.1	7.4	7.9	8.2	7.8	7.4
23	7.3	8.8	9.4	8.0	5.9	5.2	5.6	7.2	7.8	8.2	6.9	6.7

Table 415. Monthly median values of critical frequency of the F2-region (f^oF2) for each hour of the day on 75th west meridian mean time, expressed in megacycles per second, 1942

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
00	5.8	7.2	8.4	8.1	6.0	4.6	4.5	5.4	6.7	7.0	5.7	4.3
01	5.0	6.2	7.4	7.6	5.6	4.2	4.4	5.2	6.8	6.3	4.8	3.8
02	4.4	5.1	6.3	5.9	5.1	4.1	4.2	4.7	6.1	5.3	4.3	3.7
03	4.0	4.2	4.8	5.0	4.4	3.6	3.9	4.1	5.2	4.7	3.8	3.5
04	3.4	3.8	3.9	4.3	3.8	3.2	3.0	3.4	3.9	3.8	3.3	3.2
05	2.6	3.7	3.4	3.8	3.4	2.8	2.8	2.7	3.3	3.4	3.0	2.6
06	5.1	4.9	4.5	4.8	4.2	2.7	2.7	2.8	4.8	6.0	6.4	5.6
07	7.6	7.3	8.2	8.0	7.0	5.3	5.0	5.4	6.9	8.0	8.3	7.6
08	8.8	8.6	10.0	9.6	8.2	6.5	5.9	6.3	7.7	9.2	9.1	8.9
09	9.8	9.2	10.6	10.4	8.9	6.8	6.2	6.7	8.2	9.5	9.4	9.2
10	9.6	9.2	9.7	10.2	8.4	6.7	6.3	6.6	7.6	9.0	9.4	9.4
11	8.5	9.3	9.5	9.4	8.0	6.6	6.2	6.6	7.3	8.2	9.2	9.4
12	8.4	8.4	9.2	9.4	7.8	6.6	6.1	6.7	7.3	8.2	9.4	9.6
13	8.7	8.4	9.6	9.5	7.8	7.0	6.3	6.6	7.6	8.6	9.6	9.3
14	9.2	8.6	9.6	9.8	8.0	7.0	6.6	6.6	7.8	8.6	9.6	9.8
15	9.6	8.8	10.1	10.2	8.3	7.0	6.8	6.6	8.2	9.0	10.0	10.3
16	10.0	9.3	10.2	10.2	8.4	7.0	6.8	6.8	8.6	9.2	9.9	10.4
17	10.5	9.6	10.1	10.1	8.0	7.2	6.8	6.8	8.5	9.4	9.6	10.1
18	10.7	9.8	9.6	9.6	7.8	7.0	6.8	6.9	8.4	9.6	9.2	9.9
19	10.2	9.5	8.7	8.6	7.2	6.2	6.3	6.6	8.0	9.4	8.8	9.5
20	8.9	8.4	8.2	8.5	7.2	6.3	5.8	6.2	7.3	8.7	8.4	8.3
21	7.8	7.9	8.6	8.7	7.4	6.6	5.9	6.1	7.5	8.4	7.4	7.4
22	7.4	7.5	8.4	8.8	7.0	5.6	5.1	6.4	7.6	7.8	6.8	6.4
23	6.7	7.5	8.6	8.4	6.5	5.2	4.8	5.7	7.1	7.5	6.0	4.9

Table 416. Monthly median values of critical frequency of the F2-region (f^oF2) for each hour of the day on 75th west meridian mean time, expressed in megacycles per second, 1943

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
00	5.0	5.9	8.3	7.0	4.9	4.4	4.6	5.6	6.7	7.4	5.6	4.3
01	4.0	5.2	7.1	6.9	4.5	4.2	4.4	5.1	6.2	6.1	4.6	3.8
02	3.1	4.4	5.6	6.0	4.5	4.0	4.1	4.6	5.2	5.0	4.1	3.6
03	2.7	3.5	4.4	4.7	3.7	3.7	3.4	4.4	4.5	4.3	3.8	3.2
04	2.2	2.8	3.1	4.1	3.5	3.1	3.0	3.6	3.8	3.7	3.2	2.7
05	1.8	2.0	2.5	3.3	3.1	2.8	2.2	2.9	3.3	3.2	2.9	2.4
06	4.7	4.0	4.1	4.4	3.7	2.9	2.4	3.0	4.3	5.4	5.8	5.4
07	6.8	6.8	7.0	7.1	6.0	5.3	4.8	5.8	6.7	7.4	7.4	7.2
08	7.8	7.8	8.4	8.6	7.4	6.6	5.8	6.8	7.7	8.4	8.3	8.0
09	8.0	8.4	9.3	9.4	7.7	6.8	6.0	7.0	8.0	8.6	8.8	8.3
10	8.5	8.2	9.0	9.3	7.6	6.6	6.1	7.0	7.6	8.3	8.8	8.2
11	8.6	7.9	8.4	8.5	7.1	6.3	5.8	6.7	7.2	7.9	8.6	7.9
12	8.4	8.1	8.4	8.4	6.9	6.2	6.0	6.8	7.2	7.5	8.5	7.7
13	8.3	8.5	8.6	8.6	7.0	6.3	6.3	6.6	7.4	7.5	8.9	8.2
14	8.4	8.6	8.8	9.0	7.0	6.4	6.4	6.8	7.8	7.7	9.1	8.8
15	8.9	9.1	9.5	9.2	7.3	6.7	6.6	7.2	7.9	8.3	9.5	9.0
16	9.0	9.5	9.7	8.9	7.3	6.8	6.7	7.2	8.0	8.4	9.0	9.1
17	9.0	9.1	9.6	8.7	7.3	6.8	6.7	7.5	8.3	8.7	9.3	8.8
18	9.0	8.7	9.6	8.4	7.2	6.6	6.5	7.7	8.4	9.0	9.5	9.2
19	8.6	8.5	9.0	7.5	7.0	6.1	6.2	7.1	7.4	8.6	8.8	8.4
20	7.6	8.2	8.7	7.7	6.8	5.9	6.2	6.6	7.2	8.3	8.3	7.2
21	6.8	7.0	8.9	7.7	6.7	6.3	5.8	6.9	7.6	8.1	8.0	6.2
22	5.8	6.8	9.3	7.6	6.0	5.6	4.8	6.6	7.6	7.9	7.1	5.5
23	5.5	6.3	8.8	7.3	5.2	4.6	4.7	6.0	7.1	7.8	6.4	4.8

Table 417. Monthly median values of critical frequency of the F2-region (f^oF2) for each hour of the day on 75th west meridian mean time, expressed in megacycles per second, 1944

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
00	4.4	4.7	7.0	6.4	4.2	3.4	3.8	5.0	6.0	6.8	4.6	3.8
01	3.8	4.1	6.3	5.8	3.8	3.0	3.7	4.6	5.8	5.6	3.9	3.4
02	3.4	3.5	5.1	4.7	3.5	2.8	3.5	4.2	4.8	4.4	4.3	2.8
03	2.8	2.8	4.1	3.9	2.8	2.4	3.0	3.5	4.2	3.6	3.1	2.4
04	2.4	2.2	3.4	3.1	2.6	2.2	2.4	2.8	3.5	3.2	2.8	2.6
05	2.0	1.7	2.7	2.6	2.2	2.0	2.0	2.4	3.0	2.8	2.8	2.4
06	4.5	3.8	3.9	3.8	3.1	2.4	2.2	3.0	4.3	5.6	5.8	5.6
07	6.6	6.1	6.6	6.4	5.4	4.7	4.6	5.5	6.4	7.6	7.6	7.4
08	7.6	7.2	7.9	7.7	6.6	5.6	5.6	6.5	7.4	8.7	8.4	8.4
09	7.6	7.3	8.4	8.0	7.0	6.2	5.8	6.7	7.6	8.7	9.0	8.6
10	7.2	7.3	8.0	7.8	6.7	6.0	5.6	6.4	6.8	8.1	8.5	8.6
11	6.7	7.2	7.9	7.0	6.2	5.8	5.6	6.2	6.8	8.0	8.4	8.6
12	7.0	7.4	8.0	7.0	6.1	5.8	5.6	6.0	6.8	7.9	8.4	8.3
13	7.3	7.8	8.3	7.2	5.9	5.9	5.5	6.3	6.9	7.9	9.0	8.5
14	8.0	7.8	8.6	7.8	6.2	6.2	5.6	6.3	7.3	8.4	9.2	8.5
15	8.7	8.3	9.1	8.2	6.5	6.1	5.8	6.5	7.6	8.5	8.9	8.9
16	9.0	8.5	9.7	8.4	6.7	6.5	5.9	6.6	7.8	8.9	9.1	9.1
17	8.8	8.6	9.6	8.2	6.8	6.5	6.1	6.7	7.6	9.0	8.6	9.1
18	8.4	8.4	9.3	7.8	6.7	6.3	6.0	6.7	7.6	8.9	8.5	9.0
19	8.0	8.2	8.9	7.2	5.9	5.5	5.4	6.2	7.0	8.5	8.4	8.5
20	7.0	7.5	8.4	7.0	5.8	5.1	5.0	5.9	6.6	7.9	8.2	7.8
21	6.0	6.8	8.1	7.3	5.8	5.2	4.9	5.8	7.2	7.8	7.8	6.6
22	5.0	6.3	8.3	7.4	5.1	4.8	4.9	6.0	7.3	8.0	6.9	5.6
23	4.8	5.3	7.9	6.9	4.8	4.2	4.1	5.8	6.9	7.4	6.2	4.7

Table 418. Monthly median values of critical frequency of the F2-region (f^oF2) for each hour of the day on 75th west meridian mean time, expressed in megacycles per second, 1945

Hour	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
00	4.8	6.2	8.2	7.4	5.9	5.4	5.6	6.1	7.5	8.8	....	7.0
01	4.2	5.2	7.0	6.3	5.1	4.8	5.0	5.6	6.4	7.5	6.4	5.6
02	3.8	4.8	5.5	4.7	4.4	4.8	4.6	5.4	5.5	5.8	5.8	4.4
03	3.1	3.9	4.2	4.2	3.5	4.2	3.8	4.1	4.1	5.1	4.5	3.4
04	2.9	3.1	3.2	3.3	3.2	3.5	3.2	3.2	3.5	4.3	3.6	4.0
05	2.6	2.2	2.4	3.0	2.8	3.0	2.8	2.7	2.9	3.6	3.6	3.3
06	5.0	4.2	4.0	4.2	3.4	3.5	3.1	3.3	5.0	6.7	7.2	6.6
07	7.0	6.8	7.1	7.2	6.0	5.8	5.6	6.1	7.4	9.0	9.3	8.6
08	8.0	8.4	8.3	8.6	7.7	7.2	6.8	7.3	8.1	10.1	10.7	9.8
09	8.5	9.0	9.0	9.3	8.2	7.4	7.3	7.6	8.6	10.8	11.0	10.1
10	8.4	9.2	8.8	8.4	8.1	7.1	6.9	7.1	7.8	11.0	11.0	10.0
11	8.0	9.0	8.4	7.7	7.7	6.9	6.9	7.0	7.6	9.4	10.2	9.9
12	7.6	8.9	8.4	7.8	7.4	6.9	6.7	6.8	7.5	9.0	10.1	9.4
13	7.8	9.1	8.7	8.0	7.7	6.9	6.8	6.9	7.6	9.1	10.0	9.6
14	8.1	9.6	8.8	8.3	7.8	6.8	6.9	7.1	7.7	9.2	10.0	10.0
15	8.5	10.0	9.2	8.8	7.9	7.1	7.1	7.3	8.1	9.6	10.3	10.2
16	8.8	10.2	9.6	9.3	7.8	7.2	7.1	7.2	8.4	9.8	10.2	10.3
17	8.8	9.9	9.4	9.5	7.8	7.4	7.0	7.5	8.5	10.3	10.5	10.3
18	8.9	9.8	9.2	9.2	7.7	7.3	7.1	7.5	8.4	10.0	10.0	10.4
19	8.5	9.4	8.8	8.5	7.2	6.7	6.6	6.8	8.0	9.3	9.7	10.0
20	8.0	9.2	8.4	8.4	7.3	6.8	6.4	6.4	7.8	8.8	9.8	9.2
21	6.7	8.9	8.5	9.0	7.6	7.0	6.6	6.6	7.6	9.1	9.8	8.7
22	5.8	8.5	8.5	8.6	6.9	6.4	6.0	7.0	7.8	9.6	9.7	8.0
23	5.4	8.3	8.4	7.8	6.0	5.6	5.6	6.6	7.8	9.2	....	7.7

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